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Editor

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FOREIGN TRADE REVIEW

VOL. III

APRIL-JUNE 1968

NO. I

IMPORT STRUCTURE AND POLICY

*By Romesh K. Diwan**

THE IMPORTS of goods in India have been undergoing a rapid change since India became an independent country. Two factors have contributed to this change. (i) The Government has pledged itself to development planning and instituted strict import controls so as to channel the imports into directions dictated by priorities established under different plans. The capital and raw material imports have, therefore, acquired a predominant place. (ii) As a consequence of partition of the pre-independent India into India and Pakistan, the wheat-growing areas went to Pakistan. On the other hand, public health measures in the eradication of epidemics reduced the death rate considerably thereby increasing the pressure of population. Food imports, thus, have become quite necessary and in the recent years these form a category by themselves.

It is possible to divide the total imports of goods in India into eight groups of commodities. In 1960, these eight groups accounted for approximately three-fourths of the total imports. Table I on next page gives the percentage distribution of these eight groups.

It will be seen from the Table that the groups are reasonably homogeneous. "Chemicals" refers to a whole division 5, while raw cotton refers to three-digit classification. The remaining groups fall into two-digit class.

*The opinions expressed here are those of the author and should not be interpreted as reflecting opinions of the organisation with which he is associated.

TABLE I
STRUCTURE OF IMPORTS

SITC No.	Group	Percentage of total imports in 1960-61	
04	Cereals	15.6	
263	Raw cotton	7.3	59.4
5	Chemicals	7.6	
67	Iron and steel	10.9	
68	Non-ferrous metals	4.0	
72	Electrical machinery	5.1	
71	Other machinery	18.1	
73	Transport equipment	6.4	
	Other imports	25.0	
		100.0	

NOTE: The data on imports have been taken from the *UN Yearbook of International Trade Statistics*, 1964 issue, country table 2, pp. 324-26. Values are arrived at by multiplying derived quantum index by 1960 values.

For purposes of analyses, the above grouping can be rearranged into three groups, namely, (i) cereals, (ii) "capital and raw materials"¹, and (iii) others. It is the "capital and raw materials" group which is the most important, because it accounted for about three-fifths of the total imports. This particular group has been gaining in importance in the total importance and is the major source of the structural change in imports. Table II shows the growing importance of this group over the past decade or so.

TABLE II

	"Capital and raw material" imports as percentage of total imports
I Plan	31
II Plan	55
III Plan	60

(The estimates have been made from the data on imports measured in 1960-61 prices. The estimate for the Third Plan refers to the first two years, i.e., 1961-62 and 1962-63.)

¹"Capital and raw material imports" group is made up of the following seven groups: raw cotton, chemicals, iron and steel, non-ferrous metals, electrical machinery, other machinery and transport equipment.

The growth in the imports of "capital and raw materials" group is well pronounced. Thus over the period 1951-62, total imports were growing at a rate of 5.5 per cent while the imports of this group were growing at 14.4 per cent. If we break up this group into the "capital imports" and "raw material imports", the trend in the former sub-group is much higher, being 17 per cent compared to the latter's 12 per cent.²

AVERAGE AND MARGINAL PROPENSITY TO IMPORT

Development planning in India has been based on the creation of a "modern sector" using the latest technology. The use of modern technology *ipso facto* increases the need for imports of "capital and raw material" goods. The total imports, thus, have shown a rising trend and import-income ratio has been increasing. Table III on next page gives the average and marginal propensities to import for the three Plan periods.

Table III shows a steady increase in the average propensity to import (M/Y). Though the average propensity of total imports has been growing slowly, the "capital and raw material" imports have been growing very fast. So far as the marginal propensities are concerned, it would seem that in the First Plan the imports did not grow. One reason may be that the First Plan was the period in which institutional arrangements for setting up big steel plants were finalised so that it was in the Second Plan that these imports materialised. Also the Second Plan laid emphasis on heavy industry as against the emphasis on agriculture in the First Plan. The above estimates of the marginal propensity, however, are rather crude.

²The growth rates are based on the following regressions.

$\ln M = 3.9786 + 0.0555 T$	$\bar{R}^2 = .50$
(0.1314) (0.0159)	$d = 1.5$
$\ln M_s = 2.5566 + .1442 T$	$\bar{R}^2 = .88$
(.1322) (.0160)	$d = 1.72$
$\ln M_c = 1.5970 + .1725 T$	$\bar{R}^2 = .89$
(.1484) (.0180)	$d = 1.77$
$\ln M_r = 2.1026 + .1178 T$	$\bar{R}^2 = .84$
(0.1261) (.0152)	$d = 1.70$

M = imports, M_s = "capital and raw material" imports, M_c = capital imports, M_r = raw material imports, T = time.

The "capital and raw materials" group has been arbitrarily split, so that "capital" imports include electrical machinery, other machinery, transport equipment and 50 per cent of the non-ferrous metals. On the other hand, "raw material" imports comprise raw cotton, chemicals, iron and steel and 50 per cent of non-ferrous metals.

TABLE III
AVERAGE AND MARGINAL PROPENSITY TO IMPORT

Period	Average propensity		Marginal propensity	
	Total imports	"Capital & raw materials"	Total imports	"Capital & raw materials"
I Plan	6.08	1.90	-14.70	3.82
II Plan	6.96	3.85	27.25	19.91
III Plan	7.58	4.57	14.92	10.86

[The average propensity has been estimated by the formula $\frac{\sum_{i=1}^5 M_i}{\sum_{i=1}^5 Y_i}$, $\frac{\sum M_{si}}{\sum Y_i}$, where M refers to total imports, M_s to the group "capital and raw materials" and Y to national income. The marginal propensity is based on the crude method,

$$(M_t - M_{t-5}) / (Y_t - Y_{t-5}) \text{ and} \\ (M_{st} - M_{st-5}) / (Y_t - Y_{t-5}).$$

In the case of the Third Plan, the estimates refer to only the first two years, i.e., 1961-62 and 1962-63. All the data on income and imports are measured in 1960-61 prices.]

IMPORTS AS A FACTOR OF PRODUCTION

In recent years, Chenery³ has argued that the development process is limited not only by savings but also by lack of availability of imports. To quote, "We postulate a minimum import level of GNP... This import requirement results from the relatively inelastic demand for manufactured goods currently imported—particularly intermediate goods and investment goods—arising from the lack of domestic supply and their necessity in production."⁴ There is a belief in some circles that the above argument is operative in India as well. However, the imports that are relevant are "capital and raw material imports." The hypothesis, thus, is that the production function in India is not the usual one, namely, a function of capital and labour alone. Instead imports also form a factor of production.

³H. Chenery and A. Strout, "Foreign Assistance and Economic Development," *American Economic Review* 1966. This article gives the bibliography on this theory.

⁴*Ibid*, p. 689.

This hypothesis has been tested in a paper on the two gap theory of economic development.⁵

In view of the importance of "capital and raw material imports", it may be useful to find out their marginal product. This we can do by fitting a simple linear function, because the log function provides only elasticities.

Accordingly we have:

$$Y = -337.2742 + 0.7048 K + 3.4501 M_s \quad \bar{R}^2 = .89$$

(484.8232) (.2631) (1.4842) d = 2.06

(Y refers to national income. Capital series relates to the Series I and M_s refers to the capital and raw material imports. These data are described in the appendix).

The interesting thing is that though the marginal product of imports [i.e., $(\partial Y / \partial M)$] is as high as 3.45, its elasticity $\left(\frac{M}{Y} \cdot \frac{\partial Y}{\partial M} \right)$ is quite low, being equal to .09. On the other hand, the marginal product of capital $(\partial Y / \partial K)$ is as low as .69, while its elasticity $\left(\frac{\partial Y}{\partial K} \cdot \frac{K}{Y} \right)$ is quite high, being 1.32. The total of the two elasticities is 1.41, implying large economies of scale.

TECHNOLOGY AND CAPITAL INFLOWS

The heavy expenditures generated by the Five-Year Plans have created a large demand for goods in general and imported goods in particular. With the emphasis on industrial growth, both by the Government in entering the production process and by the private sector in meeting the consumer demand, the pressure on imports has become very heavy. These very factors have to some extent slowed down the growth of exports. Consequently, a system of import priorities has been generated. "Capital and raw material" imports category has been accorded the highest priority. To some extent, the higher priority has been necessitated by the nature and type of foreign loans which have become necessary to finance the gap between imports and exports. Thus in the period covered, major foreign loans have been of "tied loan" variety, i.e., the loans have to be spent on the exports of the donor countries and on "approved projects". Foreign aid and loans have normally been given on projects that do require foreign exchange. As a result of the Indian emphasis on industrial development and the nature of loans

⁵See Diwan, R.K., "A Test of the Two Gap Theory of Economic Development," to be published in the *Journal of Development Studies*.

and grants, the investment and foreign exchange have been used to set up big plants, which use or copy the technology of the donor country. This has the effect that there is a continuing demand for imports of materials, components and spare parts. To produce these requirements domestically, other new industries have to be promoted. These new industries again have to rely on foreign technology. These are thus the second effects. The analysis suggests the hypothesis that "capital and raw material imports" feeds upon itself. More specifically, the hypothesis that needs to be tested is:

$$M_s = a_0 + a_1 M_{s-1}$$

which, in other words, may be expressed as a nature of technology that generates its own demand. Considering that the M_s variable entered as an input in the production function, M_s would be of an essential character, and we may get $a_1 = 1$ and $a_0 = 0$ so that $M_s = M_{s-1}$. We will not, however, expect $a_1 > 1$ and $a_0 < 0$, because the foreign exchange resources normally would define an upper limit to the growth path given by this auto regressive scheme. To test the above hypothesis, we have the estimated equation:

$$M_s = 59.6562 + .9547 M_{s-1} \quad \bar{R}^2 = .76$$

(69.9708) (.1574) d = 2.64

The relation above does confirm the *a priori* expectation and the coefficient of M_s does tend to be greater than 1, thus implying an explosiveness in the growth of the imports of "capital and raw material" goods. This is consistent with the observation that in spite of import substitution, the technology does create demand for larger imports.

The value of $\bar{R}^2$ suggests that we can look into some other variables. The above relation tests about the nature of technology. In the analysis, we had hinted on the nature of loans and the need for loans. The hypothesis we can derive is that the imports depend not only on the nature of technology but also on the availability and nature of loans.

Our next hypothesis, then, is:

$$M_s = b_0 + b_1 IF + b_2 M_{s-1} \quad (\text{IF stands for capital inflow})$$

i.e., the imports are dependent on capital inflow. Because of the inclusion of the lagged variable M_{s-1} , the coefficient $[b_1/(1-b_2)]$ can be interpreted as the long-run propensity to import from capital inflow. Since we will expect the long-run propensity to be 1, we will expect b_1 and $(1-b_2)$ to be of the same order. In case IF enters the relation significantly, we will expect $b_1 > 0$ and significant. Since $b_2 (=a_1)$ in the earlier relation was equal to 1, we will expect b_2 to be less than 1. Also if we interpret it as an *ex ante* relationship, we will expect b_2 to be less than 1.

To test the above hypothesis, we have the data on "capital inflow". The data are given in the *RBI Bulletin* for March 1965⁶ and the definition is as follows:

Capital Inflow = current account deficit (excluding official
(IF) donations and including half of errors and
omissions)
+ non cash flow
+ retained earnings of branches and subsid-
iaries of foreign companies

Using the data on M_s and IF^7 we get:

$$M_s = 54.0745 + 0.4700 IF + 0.6481 M_{s-1} \quad \bar{R}^2 = .84$$

$$(52.8135) \quad (0.1861) \quad (0.1739) \quad d = 3.00$$

The relation does confirm the above hypothesis. The long-term⁸ propensity to import out of capital inflow is 1.33. In another interpretation, the above result would imply that only 35 per cent of the desired imports are satisfied in a year.

DEVALUATION AND IMPORTS

Recently the Government of India has announced certain measures that are bound to have an effect on the import and export sectors of India's economy. With effect from June 6, 1966, the value of a rupee has been reduced from Rs 4.76 to Rs 7.50 per US \$1.00. In addition to this devaluation, the Government has also liberalised imports of a large number of goods for some 60 industries. The magnitude of devaluation is quite high and it brings the value of the rupee in close relationship to its actual value in the foreign markets.

The arguments advanced in favour of the above measures are the classical ones. The fall in the value of the rupee will make the foreign goods costlier and hence promote the substitution of domestic goods. On the other hand, the exports will be encouraged. Because of this two-way effect, it is expected that the pressure on balance of payments will be reduced.

⁶Page 330.

⁷The IF series is measured in current prices though M is measured in 1960-61 prices.

⁸The short-run propensity is also not less than 1 as given by the following relation:

$$M_s = 190.3402 + 1.0009 IF \quad \bar{R}^2 = .63$$

$$(66.9199) \quad (.2248) \quad d = 1.16$$

However, in evaluating the effect of devaluation and liberalised imports, one has to take into consideration the character of technology and production. Our analysis in the previous sections implies that the technology of production is such that it generates further demand for imports. The argument that devaluation will help import substitution by making imports costlier does not seem to be convincing. Firstly, devaluation has simply brought the value of the rupee in close relationship to its actual value. Its effect on making the imports costlier in terms of foreign exchange is, therefore, negligible. The imports were already equally costly. Actually, liberalisation of imports will encourage the imports of spares, etc., which were more or less prohibited earlier. In that sense, it will discourage import substitution. The correspondent of the London *Economist* sums up the issue succinctly. Thus he writes: "At first sight a 57 per cent increase in the cost of imports would appear to provide a powerful incentive to displace them. But when devaluation is accompanied by the liberalisation of controls to permit the import of many goods, which had previously been under almost total embargo, the net result—as many Indian manufacturers have been quick to point out—is to diminish, rather than to increase, the incentive for further import substitution. True, a virtually complete embargo on imports of less essential consumer goods still remains in force, and the profits to be made by producing these goods domestically are as attractive as ever. But the search for domestic substitute for *essential* imports of raw materials, spares and components has already become less intense with the resumption of foreign aid, especially now that the emphasis has switched to non-project aid."

Secondly, the character of technology used and employed in India is such that it is more or less a copy of the technology employed in the donor country. It has, therefore, relevance to the resource mix in the donor countries. Since the resource mix in India is far different from the resource mix in the donor countries, the technology uses resources that are abundant in the donor countries while these are scarce in India. Unless the technology is adapted to Indian conditions, the very act of substitution would be an import-intensive process. This at least is the implication of the finding that α_1 tends to be greater than 1 and also the long-run propensity to import out of capital inflow is greater than 1. The imports seem to be determined technologically.

In view of these factors, devaluation and import liberalisation would increase, rather than decrease, pressures on imports.

⁹*Economist*, August 6, 1966, p. 573.

APPENDIX

CAPITAL

An article by Reserve Bank of India¹ makes an attempt to estimate the tangible wealth in India. Two concepts of tangible wealth are measured, namely, (i) "reproducible tangible wealth", and (ii) "total tangible wealth". The relationship between the two concepts is,

$$\text{Total tangible wealth} = \text{Reproducible tangible wealth} \\ + \text{value of land.}$$

The estimates are made for 1960-61. Two independent methods are used. One method estimates the tangible wealth for the sectors and then adds it up. The second one takes up earlier estimates made by Mukherjee and Sastry for 1949-50 and adds to these the price-adjusted net capital formation during the period 1950-51 to 1960-61. As the article shows, both these estimates come pretty close. Since these estimates have been made by independent methods, their closeness makes the estimates seem more reliable.

For our purposes, we have decided to work with the concept of "reproducible tangible wealth", because it is this concept which is directly relevant to production.² We have estimates of capital for two periods and can easily estimate a whole series of capital for the entire period 1949-50 to 1961-62. The simplest method is just to add the investment cumulatively³, i.e., use the formulation

$$K_t = I_t + K_{t-1} \quad \dots(1)$$

This formulation, however, depends upon the estimates of net investment. The data about netting are rather sketchy so that the net estimates are not very reliable. Furthermore, it is difficult to scramble from the net estimates as to how these estimates account for replacement, depreciation and obsolescence. A simple way is to assume the following relationship:

$$K_t = I_t + (1-\delta) K_{t-1} \quad \dots(2)$$

which implies that a fraction of capital is retired every year. In case the series of investment does take into consideration all the factors, then we would expect $\delta = 0$. On the other hand, $\delta > 0$ will imply⁴ that there are some factors that netting does not take into consideration. In any case δ can be considered as the correction factor for some of the errors⁵ involved in the process of netting. Accepting the

¹"Estimates of Tangible Wealth in India", *Reserve Bank of India Bulletin*, January 1963, pp. 8-19.

²One can argue that value of land also leads to some sort of productivity, but in our case where we are more concerned with physical concept, the land remains more or less a given datum.

³In effect, this is one of the methods used to arrive at the capital estimates for 1960-61.

⁴Assuming, of course, that the hypothesis in (2) is true.

⁵Jorgensen, however, gives δ the interpretation of replacement capital. He uses a similar hypothesis in his "Anticipation and Investment Behaviour" in the *Brookings Quarterly Econometric Model of the United States*, Rand McNally and Co., Chicago, 1965, p. 51, equation (2.26).

above hypothesis, we can easily expand the equation (2) into

$$K_t = I_t + (1-\delta) I_{t-1} + (1-\delta)^2 I_{t-2} + \dots (1-\delta)^n I_{t-n} + (1-\delta)^{n+1} K_{t-n-1} \dots (3)$$

so that if we have the value of capital at two points of time, K_t and K_{t-n-1} and the investment series in between, then we can solve the equation for δ . Once we know δ , we can use the equation (2) to estimate the intervening values of capital stock. Using the RBI estimates, the equation (3) gives a polynomial of n th degree. Solving this equation, we get a value of $\delta = .0116^6$, i.e., the value of $(1-\delta) = .9884$.

We have two separate series of capital based on (i) the simple hypothesis contained in equation (1), and (ii) the equation (2). The table below gives the series.

ALTERNATIVE SERIES ON CAPITAL

Year	I	II
1950-51	18739	22159
1951-52	18959	23087
1952-53	19184	23612
1953-54	19408	24513
1954-55	19636	25441
1955-56	19867	26600
1956-57	20100	28488
1957-58	20335	29875
1958-59	20574	31661
1959-60	20815	33402
1960-61	21059	35361
1961-62	21307	37081
1962-63	23189	38963

N.B. I. Series I has been constructed from the formula

$$K_t = I_t + (1-\delta) K_{t-1} \text{ where } \delta = .0116$$

II. Series II has been estimated from the formula

$$K_t = I_t + K_{t-1}$$

As can be seen from the Table, the Series II shows a higher rate of growth. Thus the 1962-63 figure is 176 per cent of the 1950-51 figure in case of Series II and 124 per cent in case of Series I. This is what one would expect *a priori*.

⁶We have also estimated the value δ using gross capital figures deflated by the capital price index with 1960-61 as 100. The value of δ comes to be equal to .05 approximately. However, this is what one would expect, considering the values include depreciation as well,

CAPITAL AND RAW MATERIAL IMPORTS

These data have been taken from the various issues of *UN Yearbook of International Trade Statistics*.

Figures for the years 1960-63 are taken from 1964 issue, country table 2, pp. 324-26.

Figures for the years 1957-59 are taken from 1960 issue, country table 2, pp. 277-79.

Figures for the years 1953-57 are taken from 1957 (Vol. I) issue, country table 4, pp. 255-56.

Figures for the years 1951-53 are taken from 1953 issue, country table 2, pp. 221-22.

Figures for the year 1950 are taken from 1952 issue, country table 2, p. 161.

Values are arrived at by multiplying derived quantum index by 1960 values.

COST OF FOREIGN TRADE AND EXCHANGE CONTROLS IN DEVELOPING COUNTRIES

By D.R. Khatkhate

ECONOMIC growth, accelerating in its rate, has now become the dominant objective in most of the developing parts of the world. For this reason, some sort of deliberateness—or substitution of the “visible” hand of the State for the “invisible” hand—has broken in the policies of these countries. One of the consequences of this shift in economic climate has been generation of attitudes of equating planning with proliferation of controls of all kinds, be they internal controls like licensing for allocation of investible resources, price and factor restrictions or external such as foreign exchange and trade controls. In point of fact, these controls have become a part of the “theology” in these developing countries, so much so that some ardent advocates of planning for economic development take any modification in these controls to mean the very negation of rapid economic growth and social justice.

The point, however, is not whether the policies in these economies should swing back to free trade—this is an utopian ideal—but whether the controls, such as there are, serve the purpose for which they have been originally devised. More specifically, it has to be found out and analysed whether the controls do not distort the priorities laid down in the Plan in a manner that the resulting costs of operating those controls tend to far outweigh the benefits bestowed on the economy. Furthermore, it would be interesting to know how far the control mechanism hampers the structural change that comes over the economy.

In this paper, an attempt is made to draw attention to some of the costs—real as well as monetary—involved in operating trade and exchange controls in developing countries. By trade and exchange controls is meant not only quantitative exchange and trade restrictions on imports, exports and other items that go to make up the profile of a country’s balance of payments but also their fiscal regulation through tariffs, subsidies and so on. In Section I, the main elements of external imbalance of developing countries, which necessitate imposition of controls, are briefly delineated. This should provide a backdrop not only to the subsequent discussion in Section II of the cost of trade and foreign exchange controls but also suggest a possible rationale for a dynamic

adjustment in the control scaffolding which is discussed in the last Section.

I

As a prolegomenon to any analysis of the cost of foreign trade and exchange controls, it is essential to go into the factors causing a deficit in the payments position of developing countries. The gap in the external account may be due to a variety of forces operating in the economy. If the economy leans heavily on certain primary commodities for its exchange earnings, an inherent tendency in their prices to fluctuate may create disturbance in the payments position. Or, alternatively, pursuit of a particular kind of fiscal and monetary policy in the domestic sphere may create pressures which might impinge on the foreign exchange resources, which often are exiguous. These types of deficit, however, are essentially ephemeral in character and do not call for either the setting up of control machinery or radical recasting of domestic fiscal and monetary policies. It is that payments deficit which has a propensity to perpetuate itself over a longer period which needs to be alleviated through clamping down of controls or a basic revision in exchange rate policies.

A kind of payments deficit, to which we are accustomed in the developing economies, is associated with the process of capital accumulation. When the rate of investment is stepped up in a situation where diversification of output is limited and the imperfection of market is pervasive, the pressures arising both from a rise in investment expenditure and the consequential increment in money incomes press upon the available foreign exchange resources. This is attributable to basically three factors:

(a) Import content of a given investment programme is high.

(b) Import content of consumption is high. The latter position is due, among other factors, to the "want" development for the commodities from the developed countries, which is a continuous process.¹

(c) The lag between the initial investment and its effect on the production of final consumption goods is long.

It is these three tendencies in a developing economy taken together, which bring about a chronic deficit in its balance of payments, which is sought to be explained in terms of what is known as

¹Hoyt Elizabeth, E.: "Want Development in Underdeveloped Areas", *Journal of Political Economy*, June 1951.

an "absorption approach".¹ Let us briefly see how these pressures on the balance of payments get built up in the wake of development programmes by examining certain basic relationships in a given economic system.

National output is given by the following expression:

$O = C + I + X - M$, where O represents output, C consumption, I investment, X exports and all other receipts from abroad and M imports and all other payments to foreigners. In that case, the aggregate domestic expenditure (E) = $O - (X - M)$.

This is merely an identity, but when it is perceived in the context of economic growth, it throws into bold relief the relationship of the imbalance in the internal economy with the imbalance in the external account. This can best be explained in relation to the Harrod-Domar equation of growth, which is expressed as under:

$$\frac{AY}{Y} = \frac{S}{Y} \cdot \frac{O}{C}$$

where Y , S , O C stand for income, saving and marginal output capital ratio. This equation, however, holds good for a closed economy. To allow for the foreign trade deficit, the equation would look like the following:

$\frac{AY}{Y} = \frac{S+B}{Y} \cdot \frac{O}{C}$, where B represents a net balance in the external account as a fraction of national income. This can be further simplified through appropriate manipulation as²:

$$I + X = S + M$$

From this, it would be clear that if there is a deficit in the payments position of a country, it should be taken as reflecting a shortage of saving, which is made good by the inflow of foreign saving. If, on the other hand, there is an excess of domestic saving over domestic investment, it gives rise to surplus on current account, which is invested abroad.

This approach to the disequilibrium in the payments position of the developing countries has certain implications, which have to be first spelt out. Since it projects too simple a relationship between investment, saving and change in the external current account posi-

¹Alexander, S.S.: "The Effects of a Devaluation on a Trade Balance", *IMF Staff Papers*, April 1952.

²See, for a fuller discussion, Meir, G.M.: *International Trade and Development*, pp. 64-82.

tion, it implicitly establishes a direct link between the internal imbalance and the external disequilibrium. Thus if the deficit in the former occurs, it can be rectified through such adjustment in the domestic monetary and fiscal policies as would reduce domestic investment to a level of domestic saving or alternatively raise domestic saving to the level of domestic investment.

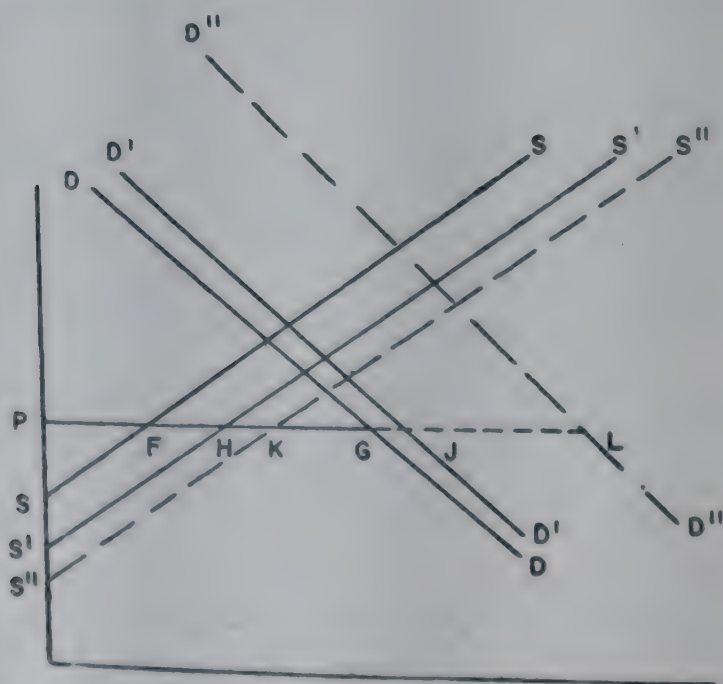
However, the absorption approach which has a close resemblance to the quantity theory tends to ignore the very dynamics of the development process, apart from purporting to set out a false causal relationship between the internal inflationary or deflationary pressures and the external deficit or surplus. The process of economic growth is one of structural transformation of the economy. At initial stages of industrialisation, the cost-price structure prevailing in underdeveloped countries tends to operate against the rapid growth of the manufacturing sector. Due to lack of necessary technical skills and infrastructural investment, the cost per unit of output in the non-agricultural sector is higher than in the agricultural sector. But this, by itself, does not mean that the manufacturing activity is less profitable, judging it from the point of view of the overall growth of the economy. The cost differences are what they are purely on the basis of a private profit calculus; from the society's point of view, they are considerably less, more so in the underdeveloped economies with excessive population pressures. It is this disparity as between the manufacturing and agricultural activity which brings about adverse changes in the balance of payments. On the one hand, exports do not sell abroad due to cost disadvantages, while the traditional commodities find it hard going in the milieu where long-term prospects for their advance are declining. On the other hand, the import substitution process has its limitations. Initially, the import substituting industries consume quite a substantial amount of imports; they can more than meet their import requirements only when they reach a stage of optimum production, with concomitant scale effects on cost of production. Until that stage is reached, import substitution tends to raise import requirements of the economy relative to its export capacity.⁴

It should be obvious thus that the payments deficit in economies undergoing structural transformation is inescapable and is a part of the very process of growth. In that case, imposition of

⁴See, for an illuminating discussion of the problem faced in import substitution, R. Prebisch: *Towards a New Trade Policy for Development*, UN, 1964, pp. 21-22; Harry G. Johnson: *Economic Policy Towards Less Developed Countries*, 1967, pp. 56-58; and N. Kaldor: "Dual Exchange Rates and Economic Development" in *Essays on Economic Policy*, Vol. II, pp. 177-197.

trade and exchange controls becomes necessary to equalise the marginal private cost and marginal social cost involved in manufacturing process, thereby bridging the payments deficit. An alternative to the elaborate scaffolding of trade and exchange controls is a floating exchange rate or a devaluation at frequent intervals so as to equate the demand for and supply of foreign exchange.⁵ For supporting a floating exchange rate, however, the underdeveloped countries should be blessed with an adequate supply of foreign exchange reserves and gold. The latter remedy, i.e., devaluation, has to answer a variety of questions raised by the relative elasticities of the demand for and supply of the products manufactured in developing countries. But common to all these is the premise that conditions relating to comparative advantage of producing manufacturing output prevailing in the developing countries have a certain inviolate permanence and that premise is challenged in the context of a growing economy where production relations are undergoing transformation. Naturally, therefore, policies like a floating exchange rate would be deleterious to the growth of these economies.

Foreign exchange and trade controls, however, do not always function smoothly. In the form in which the control mechanism is operated in the various countries, it has acquired certain rigidity which tends to thwart the achievement of basic goals. Controls are a device to ration a limited supply of foreign exchange at a price, which is less than that prevails at a point where supply and demand would be equated with no trade and exchange restriction, as would be seen from the following diagram:



⁵Milton Friedman: *Capitalism and Freedom*, pp. 67-70.

Assuming that initial price of foreign exchange is fixed at P , the horizontal distance of FG measures the excess of demand for foreign exchange over what is available at price P which is lower than the equilibrium price. The exchange controls, however, have to get adjusted with the growth of the economy to a new situation, if they are to secure any useful purpose. When, for instance, the supply of foreign exchange increases through an increase in exports and other receipts while the demand curve does not shift in the same proportion, the horizontal distance has to narrow. In theory as also in practice, the demand curve may shift upwards more than in proportion to the change in the position of the supply curve if only because the import substitution process has reached a point where it consumes more foreign exchange on balance than what it saves. In that case, the exchange controls may be construed to have militated against the efficient allocation of resources. This new position is represented by the horizontal distance of KL . On the other hand, the import substitution is of efficient kind, the new position in the control machinery would be indicated by the narrowing of the horizontal distance as given by HJ . The point to note is that the foreign exchange and trade controls should operate in a manner that they would promote more efficient production of import substitutes and sale of exports on a competitive basis. For this to be possible, the control mechanism has to have a certain degree of flexibility so as to enable it to adapt itself to the changing situation, and thus avoid the high costs involved in operating such a machinery.

II

ALLOCATIVE EFFICIENCY

In terms of the diagram in Section I, efficiency of the control mechanism lies in orienting the cost-price structure of exportables and importables in such a way that eventually the cost margin between import substitutes and imports from outside and that between the country's exports and those from its competitors is obliterated. It should mean that the controls should tend to outlive their utility over time and the equilibrium exchange rate, consistent with free trade, be established. For this to happen, resources, whether capital or labour, etc., should be utilised in an efficient manner, to yield the highest possible rate of return under given circumstances. In terms of concrete results, thus, the controls have to facilitate (a) the maximum rate of growth of the national product, (b) maximum possible economy in the use of foreign exchange, and (c) the maximum possible growth in exports. To the extent these three objectives are not attained, controls could be construed as a failure resulting in heavy economic costs.

Any controls, in their very nature, have a bias in favour of import substitution activity, as their impact on imports is more direct and visible. Further, due to the sheltered domestic market, the rate of return in import substituting industries is higher than in other types of industries. But where this bias transcends the limits beyond which the domestic resource cost in import substituting industries surges up in relation to the export industries, the balance of payments crisis, instead of improving, actually tends to be accentuated. There are many reasons for this. For one thing, import substitution, which is perpetuated by controls, raises demand—both direct and indirect—for imports and, in fact, results in much less foreign exchange saving than is initially anticipated. For another, industrialisation through import substitution does not raise the export capacity of the economy in relation to import requirements. But a far more important reason is that it leads to a slowing down of the very rate of growth of the economy, which is the dominant objective of the economic policy. The controls thus defeat the very purpose for which they are devised.

While it is easy to apprehend some of these economic costs involved on a level of abstraction, very little empirical work has been done on this aspect. However, in a recent study on the Turkish economy, these costs are concretised through a sample survey of industries affected by controls. The major conclusions emerging from the study are the following⁶:

(1) The domestic resource cost⁷ of the import substitution schemes is about three and a half times higher than that of potential export industries. The logical consequence of this was that the contribution to national product of manufacturing industries was much less than it would have been if the same resources were devoted to potential export industries.

(2) The rate of return earned on investment in export industries was smaller than that in import substitution industries.

⁶Anne O. Krueger: "Some Economic Costs of Exchange Control: The Turkish Case," *The Journal of Political Economy*, October 1966.

⁷The domestic resource cost is arrived at by taking the Turkish sale price ex-factory of the product and subtracting from it the c.i.f. value of imported direct and indirect input, per unit of output and dividing that estimate of cost by the estimate of international value added. International value added is defined as a difference between c.i.f. price of imported final product and c.i.f. price of direct and indirect imported inputs. The domestic resource cost is also calculated by adjusting for the various types of taxes paid by the producers. See for details Anne O. Krueger, *ibid.*

(3) The rate of return on foreign exchange defined as a difference between the change in export earnings per year as a result of investment and the change in imports divided by the foreign exchange cost of the investment was higher in potential export industries than in import substitution schemes.

All this seems to suggest that the imposition of foreign exchange and trade controls in Turkey has militated against efficient allocation of resources. In fact, they have aggravated the foreign exchange problems by inducing investment in directions where import demand was raised faster than what was added to foreign exchange earnings through additional exports.

LOSS OF FOREIGN EXCHANGE

Apart from the economic costs to which a reference was made above, there are some other costs as reflected in the seepage of foreign exchange through the trade and exchange controls thereby having adverse repercussions on the strategy of economic development. The clamping down of controls means that the available supply of foreign exchange is distributed to the users at a price, which is much less than the price at which the demand for it is equated with its supply. It is this gap between the actual and the equilibrium exchange rates, which acts as a sieve for the supply of the foreign exchange. This problem would be discussed under two separate but inter-related conditions: leakage of foreign exchange due to the mere fact of the prevalence of trade and exchange controls and, secondly, in a situation where differential fiscal and monetary policies are adopted.

(1) Assume that the differential between the actual exchange rate and its equilibrium level is constant, being immunised from the changes in supply and demand for foreign exchange in unofficial market. Since in such an economy, there is a large segment of unsatisfied demand for imports, the prices of imported commodities in the domestic market remain higher than the landed cost of imports at a given fixed exchange rate. This provides the inducement for import of goods illegally. This goes on to the extent that $P > B + R$, where P is the domestic price of illegal imports, B is the foreign exchange rate in the unofficial market and R the risk involved in such transaction. This activity continues till $P = B + R$.

Another kind of loss of foreign exchange that takes place under the control system relates to the clandestine outflow of private foreign capital. In countries where foreign exchange controls prevail, movement of capital is more rigorously restricted, which encourages a tendency to circumvent these restrictions. This occurs particularly in the sphere where foreign investment is substantial, yielding high

rate of profits. Since every remission of profit on large scale has to have a prior approval of the control authorities which may not be easily forthcoming, the foreign investing companies wriggle out the excess profits not permitted through the manipulation of the transactions between the principal and its subsidiary in the country concerned. One obvious way in which this is done is through overcharging the inputs and other raw materials supplied by the principal to the subsidiary.⁹ The tendency to take out retained earnings in this manner prevails so long as the rate of return on funds employed in the principal's country is higher than on the reinvestment within the controlled market. The illegal repatriation may also take place due to the adverse political situation.

The question may now be raised as to how the demand for illegal foreign exchange arising from the transactions, referred to above, is met. Admittedly, there is no difficulty as regards the second type of transaction, viz., illegal profit repatriation as the company remitting profits does so covertly through faking the imported input prices. This involves the country where foreign investment has taken place in a net loss of foreign exchange.

The demand for foreign exchange, arising from the first type of transaction is possibly met by (1) diversion of earnings from tourists, profit and other kinds of remittances to the country; (2) foreign exchange gathered through under-invoicing of exports and/or over-invoicing of imports; and (3) illegal migration of capital to the country concerned from other controlled countries for reasons other than economic. It is the first two sources of foreign exchange feeding the unofficial market which involves the country in a net loss.

(2) There are other kinds of foreign exchange losses, which arise from the particular brand of fiscal policies or incentive schemes initiated to promote exports. Obvious examples, which easily come to mind, are the subsidies for exports, tariff imposition on imports and the import entitlement schemes which India had adopted prior to devaluation of the rupee in 1966. Thus when the exports are subsidised or rewarded with import licences which are then sold at a premium in domestic market, there is a natural tendency to over-invoice exports so long as the rate of subsidy or profit on import licence is higher or equal to the premium on foreign exchange in the unofficial market. Likewise, importers are likely to fake down the value of their goods if the tariff rate exceeds the price of foreign exchange in the black market. This is, however, the demand side

⁹This has been explained at some length by J. Bhagwati in his recent paper, "Fiscal Policies, the Faking of Foreign Trade Declaration and the Balance of Payments", *Bulletin of Oxford University, Institute of Economics and Statistics*, February 1967.

of the unofficial market for foreign exchange. The supply side is represented by over-invoicing of imports and under-invoicing of exports, if the changes in the fiscal policy are such as to give the opposite type of incentives than what is implied by subsidy and tariffs on exports and imports respectively.

The price of foreign exchange fluctuates with the relative strength or weakness of each of these transactions. If, for instance, there is more of under-invoicing of exports and over-invoicing of imports, the black-market price of foreign exchange would come nearer the fixed exchange rate and *vice versa* if the forces making for over-invoicing exports and under-invoicing of imports emerge stronger. If all these forces are neatly balanced such that demand for illegal exchange implicit in over-invoicing of exports and under-invoicing of imports matches evenly with the supply of illegal foreign exchange, deriving from over-invoicing of imports and under-invoicing of exports and, further if it is assumed that all illegal demands respond inversely to changes in the unofficial cost of foreign exchange and all illegal supplies respond directly to such changes, the developing countries with foreign exchange controls might remain unscathed. These assumptions, however, hardly hold true and, on balance, the country concerned comes out a *net* loser of foreign exchange.⁹

It is necessary to analyse why it is that under-invoicing of exports and over-invoicing of imports are more predominating tendencies in developing countries than their counterparts or, in other words, why the supply of foreign exchange in illegal markets tends to become insensitive to the changes in prices of foreign exchange. The causative factors seem to lie in the internal economic situation and the taxation policies pursued in these countries. As observed commonly, there is an incessant and pervasive inflationary psychology prevailing in these countries, generated by shortages of goods of all sorts. Furthermore, the tax rates, both direct and indirect, are pitched often high so as to raise the resources for financing the targeted investment. This tends to conduce to a widespread tax evasion. The income so evaded is transmitted abroad through the unofficial foreign exchange market. Since the internal tax rates are very high, it becomes worthwhile, despite a heavy discount, to convert domestic currency into foreign exchange.

⁹Bhagwati in his paper, which deals comprehensively with faking of foreign trade declaration, concludes that over-invoicing of exports, the case which he singles out for detailed discussion, "condemned as malpractices is from both the real and the official point of view . . . advantageous to a country's overall balance of payments position". But this conclusion depends for its validity on the offsetting nature of the four types of transactions and the degree of price elasticity of demand and supply as mentioned above.

These are some of the leakages of foreign exchange which induce consumption and investment in directions where the social benefits are either nil or smaller than if the foreign exchange so leaked had been expended on the high priority alternatives. It is these costs which distort the pattern and the rate of growth of the developing countries, though it is difficult to quantify, with any degree of precision, the amount of losses of foreign exchange.¹⁰ This is, however, not to suggest that the policy alternative before the developing countries is the acceptance of free trade and abolition of all exchange controls. It is now generally recognised that these policies are good only for the developed countries, where economies of scale of production have reached a stage where the ruling market prices reflect the real factor scarcity or abundance. Their application to the underdeveloped countries would only help to perpetuate the disabilities, which the poor countries pass through in regard to division of labour and comparative cost advantage.

III

What then is the policy choice for the developing countries which can attenuate the costs involved in operation of foreign trade and exchange controls? It was observed in Section I, where the character of the external deficit of developing countries was analysed, that the policy in regard to foreign trade and exchange should be such as to narrow through time the difference between (which was represented by KL in the diagram) the equilibrium exchange rate and the fixed exchange rate. This means that the supply curve of foreign exchange should move up more than in proportion to the rightward shift of the demand curve. Such shifts would only be possible if the foreign exchange earnings rise, over time, faster than the import requirements. But as emphasised earlier, the private cost of manufactured goods in relation to social costs involved is high, which makes them uncompetitive in the international markets. This gap between the marginal private and social costs in manufacturing can better be achieved not so much through the rigid foreign exchange and trade controls or other administrative measures as by instituting a system of dual exchange rates which is mid-way between complete

¹⁰Bhagwati has made some attempt to empirically verify the extent of under-invoicing of imports in Turkey through comparison of import-export statistics on a partner-country basis. While his work opens up some new directions for empirical research in this field, its main achievement is to emphasise how formidable the task of empirical research is. J. Bhagwati: "Under-invoicing of Imports in Turkey," *Bulletin of Oxford Institute of Economics and Statistics*, November 1964, and "Fiscal and Monetary Policies and the Faking of Foreign Trade Declaration and the Balance of Payments", *op. cit.*

quantitative controls and the free trade policy. While under this system, essential imports and the realisation of traditional export proceeds are permitted at a fixed exchange rate which would be almost always lower than what it would be under free trade, the exports of newly started manufacturing goods are paid for in domestic currency at a higher rate, that is to say, at the depreciated exchange rate.¹¹ The exporters may then dispose of their foreign exchange receipts for purchase of those imports which have not been allotted foreign exchange at a fixed rate. This system of the differential exchange rates ensures a faster rate of exports and more efficient import substitution, as it subsidises exports and taxes imports in a flexible manner.

Now it is easy to see how the dual pricing mechanism could be construed as superior to the comprehensive exchange controls in its objective of reducing the losses of foreign exchange. Most of the loss of foreign exchange in developing economies occurs through under-invoicing of exports, over-invoicing of imports and the overpricing by foreign subsidiaries of the inputs purchased from their principals. Under the dual exchange rate system, these costs are likely to be a great deal less. For one thing, the area of under-invoicing would be reduced as a certain proportion of exports, viz., the new manufactures would not pay for being under-invoiced. The tendency to under-invoice these exports would be discouraged by the floating rate of exchange. More the extent of faked under-valuation of exports, greater would be the loss incurred as the exporter would deny himself the advantage of the higher floating exchange rate. It is true, no doubt, that the faking might prevail in regard to the export of traditional commodities, the proceeds from which would accrue at a fixed exchange rate. But this under-invoicing is not likely to result in a net loss of foreign exchange, as it is almost certain that exchange so drained out flows in at a floating exchange rate. For this to occur, it is necessary to apply the floating rate not only to manufacturing exports but also to invisible earnings. Besides, in a growing economy, traditional commodity exports as a proportion of national income would be declining, thus weakening the tendency to under-invoice in the long run. For the same reason, the tendency to over-invoice imports would be weakened, though not to the same extent. For one thing, there would not be any particular gain in illicit appropriation of foreign exchange with all its risks because they can, if they so desire, obtain it *at a cost* in the free market. For another, the importer would not feel as great an urgency as under a rigorous exchange control system to transfer illegally funds abroad,

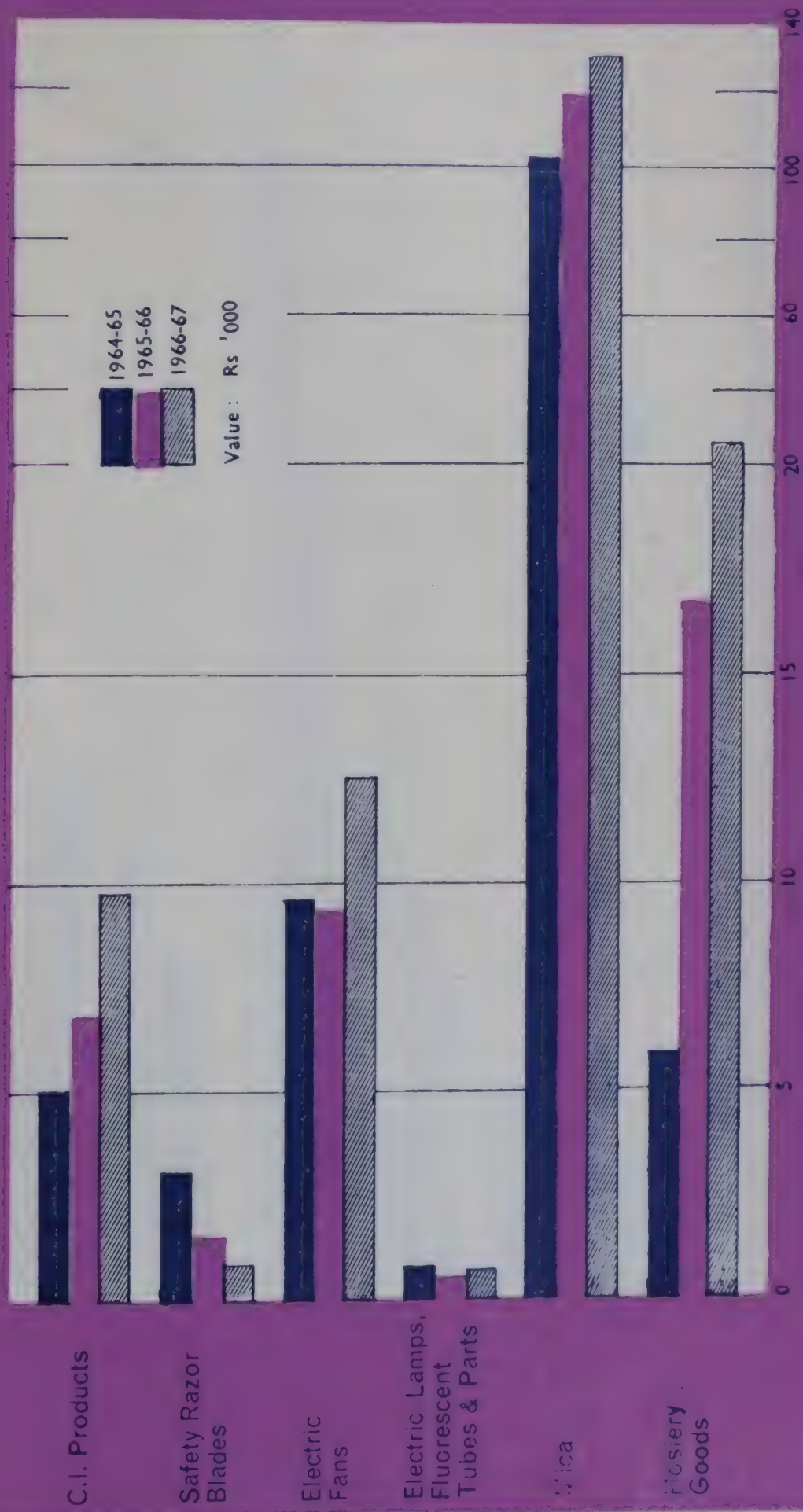
¹¹N. Kaldor: "Dual Exchange Rates and Economic Development," *op. cit.*

and thirdly, the over-invoicing would be confined only to the category of essential imports and to that extent the loss would be modest.

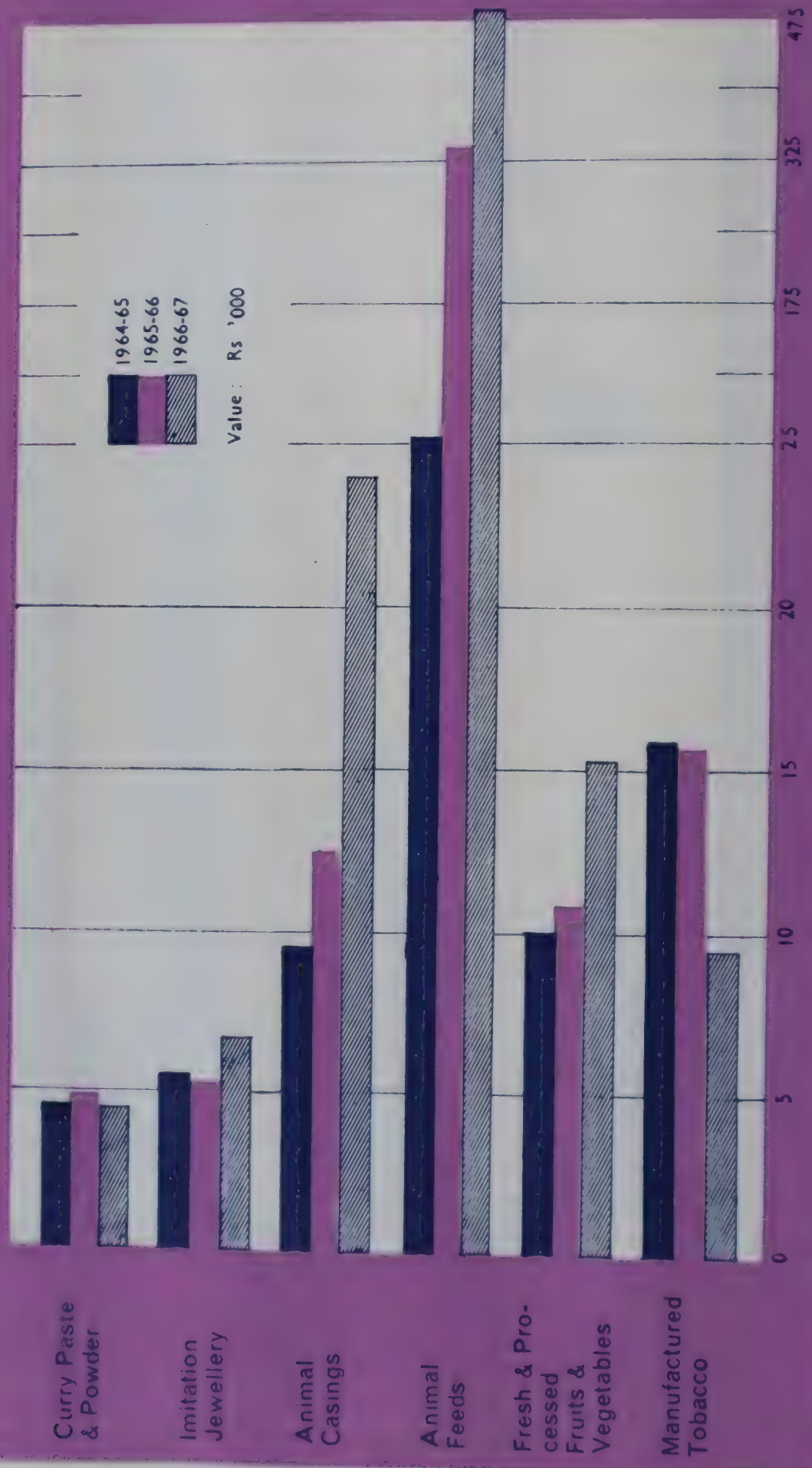
The mechanism of dual exchange rates, by its very nature, can only be an interim remedy; nor is it suggested to be one under which foreign exchange losses could be prevented altogether. All that it means is that the mechanism, being flexible in its operation, would easily adapt itself to the dynamic situations in a developing economy and would reap the benefits of a free market *albeit* within the constraints imposed by the backwardness of the economy where it is set up.

INDIA'S FOREIGN TRADE INDICATORS

IIFT COMMODITY STUDIES — EXPORT PERFORMANCE



IIFT COMMODITY STUDIES – EXPORT PERFORMANCE



AN ANALYSIS OF TRADE BETWEEN INDIA AND BRAZIL

I. A DIAGNOSTIC STUDY

*By Gian Singh Sahota**

INTRODUCTION

INDIA, the largest country in the non-communist Asia, and Brazil, the biggest in South America, have many economic and physical characteristics in common. Both are geographically large; underdeveloped ex-colonies of Europe;¹ lying in tropical and temperate zones (one to the north of the equator, the other to the south); producing, exporting and importing, more or less, similar products; currently engaged in extensive industrialisation programmes (with emphasis in Brazil on import substitution and in India on heavy

*This paper will form an appendix to a larger work, *A Comparative Study of the Underpopulated Developing Economy of Brazil and the Overpopulated Developing Economy of India*, which the author plans to bring out in due course. This paper was prompted by a meeting of the Finance Minister of India, Mr. Morarji Desai, and the Finance Minister of Brazil, Mr Delfim Netto, at the occasion of the October 1967-Rio de Janeiro Convention of the IMF and IBRD. The two Finance Ministers expressed interest in increasing trade between the two countries. Adequate information with regard to the diagnosis and future prospects of trade between these countries was, however, lacking. The author felt it desirable to make some contribution in filling this gap.

Such a study would not have been possible without the author's visit to Brazil. Thanks are, therefore, due to USAID under whose auspices the author came to Brazil on a two-year assignment. Acknowledgements are also made to the GPED and the GCLAS, Vanderbilt University for meeting part of the research costs. The views expressed in this study are entirely those of the author.

¹Brazil was colonised by Portugal in the 16th century. She got her independence from Portugal in 1822, after over two centuries of Portuguese rule. India was ruled by the British for over two hundred years until 1946. The Indian population is native and there is only a small fraction of pure and even mixed white population still living in India. Brazil's population mostly consists of the migrants or their descendants from Europe. Brazil is the only country in the whole of South America whose language (Portuguese) is spoken and taught in schools in some parts of India (viz., Goa, Daman and Deco). (The language of the rest of South America is mainly Spanish.)

industry) as a result of which both occupy the top positions as international debtors (India with about 7 billion-dollar and Brazil with about 3 billion-dollar foreign loans as of June 30, 1966).² It would not be an exaggeration to say that the future of South and South-East Asia is going to be immensely influenced by India and that of South America by Brazil.

A viewer of the two economies naturally asks the obvious question: Why is there practically no trade between the two developing bigs? The answer suggests itself almost as spontaneously, though somewhat superficially: the transportation costs due to geographic distance and the parallelism of the two economies. Brazil is out of the main trade routes connecting India with the outside world and physically too far. Each of the countries depends for her shipping and related services largely on other nations. With minor exceptions, the dominant domestically produced goods and services are similar and the major imports and exports are much the same.³ The distance and parallelism can, however, be at best only a partial explanation of the near non-existence of trade between Brazil and India. The post-World War II experience has shown that it is not necessary for trade to take place to the advantage of two trading countries that their economies be dissimilar. After all, more trade is going on between the industrial countries of Western Europe, North America, Oceanic countries and Japan than between these countries and the non-industrialised countries of Asia, Africa and South America. The comparative-cost advantage can exist in different sectors and branches of the seemingly homogeneous economies. As far as the distance cost is concerned, India has a significant quantum of trade with (a more distant country) Argentina the ships to which country from India have almost necessarily to stop at the Brazilian ports. The purpose of this paper is to analyse the factors that may explain the current state and determine the future prospects of trade

²The debts have increased since. The next two largest international debtors are Pakistan with US \$2.34 billion and Mexico with US \$2.15 billion. The twelfth largest international debtor is Nigeria with US \$0.62 billion. Annual service payments on external official debt as percentage of exports of goods and services come to 22.0 per cent for India and 29.4 per cent for Brazil, the highest among all the countries of the world. Source: World Bank (1967), Tables 6 and 7.

³Certain contrasts are also striking. Examples are: population density (India is overpopulated, Brazil is underpopulated); length of history (one has thousands of years old history, the other only four-five-hundred-year old history); inflation (starting with World War II, India has been a reasonably stable economy up to about the mid-'sixties while Brazil has been experiencing a high inflation, on an average a price rise of roughly 25 to 30 per cent per annum for the past two decades or so); and so on.

between the two sub-continent. The problem is approached from three angles:

(a) a diagnosis of the current foreign trades of the two countries with the rest of the world and between themselves; the static and dynamic advantages of the two countries under study in the production of various commodities; recent trends in the national production, imports and exports; and the prospects of self-sufficiency or surpluse of various traded commodities (Section 2).

(b) an analysis of the nationally desired trade flows and the structures of protection of the two countries as indicated by nominal tariffs and effective rates of protection (Section 3).

(c) an evaluation of the actual performance of the domestic industries *vis-a-vis* the objectives of protection, the emerging comparative advantage and future prospects of trade (the final section).

2. A DIAGNOSIS OF TRADE AND RELATED ECONOMIC CATEGORIES

To begin with, a broad picture of India and Brazil, the largest countries in their respective continents, in comparison with the largest countries of some of the remaining continents, is presented in Table I on p. 37. The contrasts between India and Brazil, on the one side, and the remaining countries of the Table, on the other, are obvious—the one group consists of the developed countries, the other group of the underdeveloped countries. Between India and Brazil, it may be observed that nowhere the disparity between arable land and population is greater than that in these two countries: with about 1/5th of excess arable land, Brazil has only 1/6th of India's population. Yield per acre for almost each of the major cereal crops in Brazil is higher than the corresponding yield in India, indicating, *inter alia*, that the extensive margins of agricultural land have perhaps been stretched too far in India. Yet no more than 50 per cent of labour force is in agriculture in Brazil against the corresponding figure of about 70 per cent for India. The inflation rates in the two countries are fast getting closer. Thus, there can hardly be a more convincing case for a movement of agricultural labour from one country to the other. For instance, since the guided immigration from Japan began in 1952, about a hundred thousand Japanese farmers have migrated to Brazil and by now occupy an area equal to over half of the cultivated area of Japan.⁴ Within a few years

⁴See the Ministry of External Relations, *Brazil 1966: Resources and Possibilities* (Rio de Janeiro, 1966), p. 132. Approximately 70 to 80 per cent of the Japanese own land in Brazil. In addition to jute and pepper, they have a vast cooperative network for producing and selling coffee, green vegetables, tomatoes, peaches and similar products. They have also introduced valuable crops like silkworms, tea, strawberries, persimmons and so forth.

through well-organised cooperatives the Japanese settlers have turned Brazil from a practically non-producer of such crops as pepper and jute into an exporter of the same commodities—incidentally both crops are competitive to India's near-monopoly in the commodities (especially jute). The rubber production has also been significantly revived.⁵ The hindrances for the international movements of labour, however, are so insurmountable that not much hope can be pinned in this transfer. The comparative advantage must be sought for in the movement of goods rather than factors.

Table II on p. 38 presents a comparative view of a number of economic indicators—rates of change, magnitudes, indexes, etc., of commodities and non-commodity items—for the two countries for the years (period) 1951 and (to) 1966, unless otherwise stated. These indicators reflect the emerging scope and prospects of trade between India and Brazil. The non-commodity items represent certain qualitative, institutional or structural aspects of the economy which are pertinent to the study of economic and trade development. Examples are: the literacy rate, ownership patterns of rural land, technical and higher education, population, per cent labour force in agriculture, size of the national planning commissions, and so on. The commodity items provide two kinds of information: (a) the volumes of production in 1951 and 1966 or the rates of increase between 1951 and 1966 of various commodities indicating the *expansion* of the industries or commodities concerned and so (to some extent) the export potentialities. (b) Information is provided as to whether the commodities are exported or imported, revealing actual changes, if any, in the trade flows.

Some of the main features of the economic changes worth noting in the two economies are: the post-War rate of growth of industrial expansion has been impressive and approximately the same in the two countries. The prospects for future exports of industrial goods, therefore, seem good for both the economies. A noteworthy progress in both the countries has been in the production of heavy industry like steel, aluminium, machine tools, railway equipment (more in India than in Brazil), automobiles (more in Brazil than in India), and in education (particularly in India). Even though the rate of growth of agricultural production has been twice as high in Brazil as that in India (and the industrial rates of growth are nearly the same), the labour force in Brazil has been moving out of agriculture at a rate of approximately one percentage point per year. In

⁵In the 19th century and up to the first decade of the 20th century, (the North) Brazil had a flourishing rubber trade. After that, the rubber boom of Brazil was practically killed due to a massive competition from the new rubber economies of Malaysia, Indonesia and other SE Asian countries.

India, the corresponding rate is about 0.2 percentage points per year.⁶ The rates of investment and saving have approximately doubled in India since 1951. In Brazil, investment has remained constant at about 19 per cent of GNP while the rate of saving has increased by about a one-third. Yet, the Brazilian rates are still about 50 per cent higher than the corresponding rates in India. In spite of centralised planning in India (with the Planning Commission consisting of about 1,400 economists and other technicians as against a small number of about two scores in Brazil), the government revenues (centre, state and local) as percentage of GNP are about 25 in Brazil and only about 13 in India. The income inequalities (as judged by land ownership) are more pronounced in Brazil than in India. This may be an indication of higher proportionate demand for luxury imports and domestic consumption in Brazil relative to that in India. The absolute values of exports of the two countries are almost equivalent, but during the past couple of years India has had high adverse balances of trade while Brazil has had favourable balances of trade. Both countries have made significant progress in nuclear energy development, and with minor exceptions both have, by and large, domestically available nuclear materials. Since the export of certain of the nuclear and related materials essential for national defence is prohibited, no trade may be expected in these materials even if a country may have surplus of these.

Coming to manufactures, minerals and tradable crops, the two countries are strikingly on a parallel footing (observe, e.g., Items 13-34). Both countries have made noteworthy progress in the production of a number of commodities during the past 15 years. But on a broad view, what one country exports (imports) the other country does too. A very close inspection, however, indicates that Brazil retains superiority in the volume of production of automobiles and petroleum (though both India and Brazil import these commodities), coffee (which is exported by both countries), and rice (which Brazil exports and India imports). On the other hand, India retains lead in the rate of expansion and volume of production of coal (which India exports, Brazil imports), in the volume of production of jute textiles (which both export), the volume and rate of expansion of machine tools and railway locomotives (which both import), and the production of tea and raw jute (which both export). Thus, potentially, Brazil has started threatening the Indian monopoly of jute and black pepper. India, on the other hand, is showing

⁶For the determinants of rapid rate of migration in Brazil, see my "An Economic Analysis of Internal Migration in Brazil," *Journal Pol. Economy* (forthcoming).

rapid signs of being able to supply sewing machines, aluminium, railway locomotives and handloom cloth. Since Brazil imports wheat and exports rice, if India can come up by the early 1970's with surplus wheat, it can be traded against rice with Brazil. All the above statements, however, are subject to the proviso that the two countries find mutual trade in the given commodities more economical than with other countries. This may, however, be difficult to realise, considering the geographic distance between the two countries.

A comparison of the education and training facilities is worth noting. Brazil leads in engineering training. India leads in university and higher-education training. Brazil has higher literacy rate, as seen earlier, and has 489 primary and secondary teachers per 100,000 of population against the corresponding figure for India of 302; 30 physicians and dentists per 100,000 of population against India of 15 only; while India leads Brazil with an enrolment of 220 at universities and equivalent institutes per 100,000 of population against the corresponding figure for Brazil of 132.⁷ These statistics indicate that there is a scope for India and Brazil of exchanging students—Brazil offering fellowships and/or other facilities for engineering students from India (especially from the Portuguese-speaking territories of Goa, Daman and Deo) and India reciprocating in the higher-education (graduate-level) sphere.

Since minerals can, in general, not be easily substituted through manufactures but can in general be done through foreign trade, it would be of interest to have a close look at the deficiency and abundance of particular minerals of the two countries. The available information is presented in Table III on p. 42. Leaving aside the minerals that are essential for defence, given the trade barriers for manufactured commodities, and subject to transportation costs, it is in the mineral sector that trade has more prospects. As may be observed from this Table, the picture is the same here too: both countries are deficient or surplus in almost the same minerals. Both countries are rich in manganese, iron ore and mica; both are deficient in good-quality coal (Brazil more than India), phosphatic materials, sulphur, potash, tin, zinc and similar metals. Some of the defence materials whose export is not prohibited and in which Brazil is deficient but India is not are: tantalum, magnesium, molybdenum, coal and aluminium. Out of the 31 minerals and metals vital for national defence mentioned in the Table, India is deficient in ten (neglecting the five minerals for which the data are not available) and Brazil in 16 (neglecting two for which data are not available). The minerals which are deficient in India and which Brazil is in a position

⁷These figures relate to 1960 or neighbouring years. Source: UN (1963); UNESCO (1961); and F. Harbison and C.A. Myers (1963).

to export are diamonds, precious stones, beril, quartz, etc., all of which are useful for industrial purposes of one kind or the other.

The present trade between India and Brazil is only a miniscule fraction of the overall trade of the two countries with the rest of the world. Between 1951 and 1966, Brazil's overall exports to India doubled from US \$75,000 to \$153,000 (the latter figure being only .012 per cent of Brazil's overall exports to the whole world); while India's exports to Brazil declined from US \$908,000 to \$708,000 (the latter figure being only .008 per cent of India's overall exports to the whole world). India's exports to Brazil are less than 3 per cent of her exports to Argentina.

So far we have concentrated upon a particular aspect of the static comparative advantage, i.e., the comparative advantage as might be reflected by the availability or non-availability for exports of the given commodities in the two countries. In the absence of free trade between the two countries, this is one and obvious way of looking at the comparative advantage. As we know from the elementary theory of trade, however, trade can exist to the benefit of two trading countries even in the commodities which both countries produce provided there is *relative* comparative advantage in the production of particular commodities in one country *vis-a-vis* the other. A study of the relative (as well as absolute) comparative advantage, even in the *static* sense, will involve a measurement of unit costs of production for the tradable commodities. An inquiry into the *dynamic* comparative advantage will further involve the estimation of cost functions (and projections therefrom), including the effects on costs of such dynamic factors as technical change, scale economies, external economies, the pace and quantum of experience gained in the production of the commodities and their inputs over time, and so on. Obviously, such an analysis is beyond the scope of this paper. Without saying something about the comparative advantage, however, the prospects of trade between two countries cannot be demonstrated. With a view to doing this, an indirect procedure was adopted. That is to say: (a) The rates of domestic expansion of individual industries or commodities of the two countries and the trends in their deficiencies or surplusages over the past fifteen years or so were compared with a view to see whether the same might reflect the underlying comparative advantage. (This was done in Table II, which, unfortunately, did not reveal wide relative differences in the expansions of the corresponding industries). (b) Quantitative changes in the exports and imports of the products of over 200 two- to five-digit industries of the two countries during the years 1961 and 1964 were analysed. It was expected that such a (disaggregated) study of the export-earning, import-saving, and other industries would go some way in explain-

ing the future prospects of trade between the two countries under study. This analysis will be taken up starting with the paragraph that follows. (c) The actual changes in exports and imports, however, show only the end-results of both the comparative advantage as well as guided trade policy which may consist of import (as also export) tariffs, import controls and restrictions, export premia and subsidies, and similar measures. The long-run effects of such trade barriers are often different from and opposite of the short-run effects. The study of comparative advantage in trade will not, therefore, be complete without an analysis of the tariff structure. Accordingly, a detailed analysis of the effective rates of protection of the two countries is also provided and will be presented in Section 3. (d) Lastly, the actual effects of protection and trade policy are very briefly investigated in the final section.

Coming then to an analysis of the recent trends in the exports and imports of India and Brazil, the relevant information for over 200 comparable commodities is presented in Table IV on p. 44. The data were compiled for the years 1961 and 1964 for a comparative study of the exports and imports of each of these commodities for India and Brazil. Each of these commodities is analysed to give, *inter alia*, the following information:

- (a) Total exports of the commodity by the country concerned in 1961 and 1964.
- (b) Total imports of the commodity by the country concerned in 1961 and 1964.
- (c) Exports (imports) of the commodity as a percentage of total national exports (imports).
- (d) Exports of the commodity concerned as a percentage of the exports of the same commodity from all the underdeveloped countries to all the developed countries (where "all the underdeveloped" and "all the developed" countries are defined in the footnotes to Table IV).

It will be observed that out of about 222 (aggregated or disaggregated) commodities analysed in Table IV, there are:

- (i) 122 commodities which both Brazil and India import,
- (ii) 46 commodities which both Brazil and India export,
- (iii) 14 commodities which India imports but in which Brazil is self-sufficient,
- (iv) 16 commodities which India exports but in which Brazil is self-sufficient,

- (v) 12 commodities which Brazil imports but in which India is self-sufficient,
- (vi) 19 commodities which Brazil exports but in which India is self-sufficient,
- (vii) 3 commodities (042: rice; 231: crude rubber; and 62901: rubber tyres, etc.) which or some varieties of which India imports and Brazil exports, and
- (viii) 4 commodities (054: vegetables; 311: coal, coke, etc.; 31101: coal; and 65: textile yarn) which or some varieties of which India exports and Brazil imports.⁸

Out of the 8 commodities of Items (vii) and (viii) above that one country exports (imports) and the other imports (exports), rice is perhaps a temporary shortfall in India; coal and coke are bulky minerals the trade in which is profitable only if the main transshipment consists of less bulky and more valuable tradable goods and coal is only a subsidiary one; vegetables, being perishable, can at best be traded with neighbouring countries only. The rubber imports/exports of the two countries are insignificant and may be ignored. India has large export capacity in footwear, but the import needs of Brazil are negligible. This information, thus, also fails to reveal any comparative advantage of one country over the other.

Additional information provided in Table IV indicates that India has expanding exports in 20 of the commodities, dwindling exports in 8, decreasing imports in 13, and increasing imports in 17 of the commodities of the Table. Brazil has expanding exports in 9 of the commodities, contracting exports in 10, declining imports in 20, and rising imports in 28 of the commodities studied.⁹ As may be discerned from a careful inspection of

⁸Due to aggregation, there appear certain commodities which are both imported and exported by both the countries. As a result, the commodities itemised here may exceed the number shown in Table IV. Moreover, the commodities of Table IV also are not exclusive. That is, there are some commodities which are the aggregates of their components.

⁹The expanding exports are:— India: 05, 051, 06101, 071, 081, 08103, 1, 121, 281, 311, 6, 61101, 65, 65202, 65304, 672, 69, 71, 841, 851, total=20. Brazil: 0111, 2, 262, 26201, 281, 5122, 6, 67, 71, total=9.

The contracting exports are:— India: 06102, 075, 26301, 27213, 41211, 55101, 65201, 681, total=8. Brazil: 042, 051, 061, 072, 0721, 221, 28307, 73, 9, 931, total=10.

Table IV (or summarised information as given in Footnote 8 above), there are several commodities whose imports/exports have expanded in one country and contracted in the other. For instance, out of the 20 expanding exports of India and 9 expanding exports of Brazil, only 3 are common. Out of the 17 increasing imports of India and 28 increasing imports of Brazil, only about 6 are common. To the extent, therefore, the disparate increases and decreases of exports and imports of the two countries reflect real comparative advantages or disadvantages, the possibilities of the existence of the conditions conducive to trade between the two countries are indicated. The comparative advantage reflected by these changes may, however, be created artificially by protection or export subsidies. Accordingly, we must analyse the tariff structures of the two countries and the intended and the realised effects of the same.

Before taking up the tariff analysis, it will be useful to note the probable monopoly positions of the countries under study in their exports of particular commodities. This information can be obtained from columns 7 and 16 of Table IV. These columns give the ratio of the exports (to any country) of particular commodities of the countries under study to the corresponding exports of the underdeveloped countries as a whole to the developed countries as a whole. This is a special way of describing the monopoly power of a country in international trade. It indicates the monopoly power of the country concerned over the markets of the developed countries in case it can divert all its exports of the given commodity to the developed countries, taking into consideration the supply of the other underdeveloped countries. The number of commodities, for instance, for which the ratio defined as above exceeds 1/8ths is 19 for India and 5 for Brazil—3 of which are common.¹⁰ Thus, for example, if Brazil and India

(Continued from previous page)

The declining imports are:— India: 231, 24, 26, 262, 3, 312, 313, 31302, 4, 5, 531, 68101, 69, total = 13. Brazil: 231, 2311, 251, 5992, 6, 641, 64101, 69, 691, 7, 71, 711, 71104, 715, 7193, 72, 722, 731, 7328, 734, total = 20.

The rising imports are:— India: 04, 041, 042, 05, 051, 052, 561, 68104, 7, 71, 711, 71101, 715, 71603, 721, 73102, 73103, total = 17. Brazil: 0, 013, 023, 0312, 04, 041, 05, 051, 054, 284, 5, 512, 513, 531, 5611, 581, 664, 6743, 676, 68, 68201, 6932, 71105, 7142, 7151, 71602, 7184, 8, total = 28.

¹⁰These commodities are:— India: 051: fruits; 074: tea; 075: pepper; 081: fodder n.e.s.; 211: hides; 265: vegetable fibres; 282: iron ore; 28307: manganese; 29: animal materials; 41211: castor oil; 61101: leather; 65: textile yarn, etc.; 65201: cotton fabrics: grey; 65202: cotton fabrics: other; 65304: fabrics of jute; 65601: other jute manufactures; 65701: carpets, etc.; 681: iron and steel; 7: certain types of machinery, etc. Brazil: 051: fruits; 071: coffee; 0721: cocoa; 242: wood; 265: vegetable fibres; 28307: manganese.

together increase their exports of manganese, coffee and tea to the markets of the developed countries, they may significantly push the prices of these commodities down.

TABLE I

CERTAIN PERTINENT FIGURES FOR THE LARGEST COUNTRY OF EACH OF THE FOLLOWING CONTINENTS*

	<i>USSR of Eurasia</i>	<i>USA of North America</i>	<i>Australia of Oceania</i>	<i>India of Asia</i>	<i>Brazil of South America</i>
(1)	(2)	(3)	(4)	(5)	(6)
1. Total area (in '000,000 hectares)	2,240	936	769	327	851
2. Arable land and land under permanent crops (in '000,000 hectares)	230	185	33	162	191
3. Yield per hectare (,00 kg.) of					
Rice	22.6	41.8	61.1	13.7	15.4
Wheat	10.5	16.9	12.5	8.9	16.9
Maize	16.6	40.3	22.4	9.9	13.2
Potatoes	80.0	217.0	147.0	81.0	88.0
Cotton	6.2	5.1	1.6	1.2	1.9
4. Inflation: Index of general price level					
in 1966 with 1952 = 100	..	110	..	170	6720
in 1966 with 1961 = 100	103	106	109	136	761
in 1966 with 1965 = 100	..	102	..	116	140
5. Per capita income, 1964 (US \$ at parity prices)	..	3,002	1,807	83	205
6. Population, 1965 (millions)	230	195	11	482	81
7. % output originating in agriculture, 1965	22	4	12	46	29
8. % labour force in agriculture, 1965	40 (1958)	12 (1950)	17 (1947)	70	50
9. Per capita electricity generation, 1964 (KWH)	2,008	5,665	2,741	65	364

*The relevant data for China and the respective country from Africa could not be obtained. In the case of India, the year stands for the year ending March 31, while for the other countries it means the year ending December 31.

TABLE II

CERTAIN ECONOMIC INDICATORS REFLECTING THE SCOPE AND PROSPECTS OF TRADE BETWEEN INDIA AND BRAZIL¹

		India	Brazil ¹
1. Annual simple average rate of growth of industrial production	1950-1963	13.61	15.9
2. Annual simple average rate of growth of per capita income	1951-1966	1.32	2.9
3. Annual average compound rate of growth of population	1950-1960	1.98	1.36
4. Annual simple average rate of growth of agricultural production	1950-1963	3.1	6.0
5. GNP (millions US \$ at parity prices)	1965	37,452	12,875
6. Per cent labour force in agriculture	1951	66.85	64.0
	1961	64.88	54.0
	1965	63.85	50.5
7. Literacy rate	1951	24.0	35.8 (1950)
	1961	29.3	44.3 (1960)
8. Increase in land under cultivation (million acres)	1950-1965	12.6 ¹	12.9 ¹
9. Fertiliser consumption ('000 tons of NP + K)	1951	691	.0451
	1966	8401	4091
10. Fertiliser production ('000 tons of N only)	1951	53	insignificant
	1966	250	256
11. Electricity generated (millions of KWH)	1951	6,575	1,863 (1950)
	1966	36,400	7,411
12. Coal mined (millions of tons)	1951	32.8E	2.01
	1966	68.01	3.201
<i>Production of :</i>			
13. Tea (million tons)	1951	..E	..
	1966	.375E	.006E
14. Coffee (million tons)	1951	..	..
	1966	.060E	52.8E (bags)
15. Natural rubber (million tons)	1951	..	.015
	1966	.0501	.0221 (1962)
16. Rubber manufactures	1966	1	S
17. Petroleum (million tons)	1951	..	..
	1966	17.251	1111 (barrels)

TABLE II (Contd.)

		India	Brazil ^a
18. Pig iron (million tons)	1951	.36I	.7I
	1966	3.0I	2.5I
19. Steel ingots (million tons)	1951	1.47I	.900I
	1966	6.2I	2.8I
20. Aluminium (million tons)	1951	.004I	.004I
	1966	.065S, E (1970)	.088I
21. Copper (million tons)	1965	.025I	.005I
22. Machine tools (graded) (millions of US \$)	1951	.4I	.224I (1959) ^b
	1966	30.7I (50%)	..I
23. Railway locomotives (number)	1951	7I	insignificant
	1966	276I	insignificant
24. Sewing machines ('000 machines)	1951	33	1.5I
	1966	450S	..
25. Automobiles ('000)	1951	16.5I	61.1I (1958)
	1966	68.5I	174.1I
26. Sugar (million tons)	1951	1.13	1.60E
	1966	3.55E	4.00E
27. Petroleum products (million tons)	1951	.2I	1.06I
	1966	9.9I	12.6I (1962)
28. Raw silk (million kg.)	1951	1.14	..
	1966	2.15	1.60
29. Cotton textiles (million metres)	1951	3.401E	.619E
	1966	4.434E	1.986E
30. Handloom cloth (million metres)	1951	917S	insignificant, I
	1966	3,146E	insignificant, I
31. Jute (raw) (million tons)	1951	1.7I (1948)	..
	1966	4.48I	..S
32. Jute textiles (million tons)	1951	.3E	.002I
	1966	1.4E	.061E (1964)
33. Nuclear materials	1951	..	S
	1966	S (1970)	S
34. Nuclear energy development	1951	nil	nil
	1966	advanced stage	advanced stage
35. Technical and teacher training (admission in '000 numbers)	1959	38I	..
	1961	..	347
36. Higher and special education	1959	1,06I	..
	1961	..	101

TABLE II (Contd.)

		India	Brazil ^a
37. Agricultural colleges at degree level (intake of students [number])	1951 1966	1,060 10,000	275 ^a 3,816 (1964)
38. Veterinary colleges at degree level (intake of students [number])	1951 1966	434 1,400	85 ^a 1,455 (1964)
39. Central, state and local government revenues as percentage of GNP (1963)	1951 1966	6.5 13	17.7 24.5
40. Percentage of indirect taxes to total taxes of all-level governments	1951 1966	56.3 67.4	67.2 73.0
41. Percentage of investment to GNP	1951 1966	6.05 13.7	18.9 19.7 (1963)
42. Percentage of private saving to GNP	1951 1966	4.9 10.0 ⁷	11.1 14.4 (1964)
43. The number of employees of the Planning Commission	1951 1966	.. 1,400 ³ 60,258 ⁴ 82,535 ⁵ 297,433 ⁶	.. 40 N.A. N.A. N.A.
44. Agricultural land ownership	1966	ceiling of roughly 30 standard acres per owner	No ceiling About 80 families are believed to own about a quarter of ag. land
45. Brazil's overall exports to India (ooo, US \$)	1951 1966		75 (1960) 153 (1963)
46. Brazil's overall imports from India (ooo, US \$)	1951 1966		908. (1960) 708 (1963)
47. Imports of cereals 1956 to 1964 (millions of US \$)	1951 1966	.. 2,527 ¹	.. B ²
48. Imports of wheat (million metric tons)	1951 1966	.. 12 ¹	.. .70 ¹
49. Beans (million metric tons)	1951 1966	.. 12 ¹	.. .70 ¹
		Second largest producer in the world, S	Largest producer in the world, S

TABLE II (Contd.)

	India		Brazil ^a
50. Value of exports (millions of US \$)	1951	1,200	1,347 (1950)
	1966	1,610	1,595
51. Foreign debt (billions of US \$) (approximately)	1951	.5	..
	1967	7.0	3.5
52. Balance of payments (current account) (per cent of exports)	1951	+ 6.5	-20.6
	1966	-40.0	+ 2.4

^aI means the country needs imports of the commodity concerned; S means the country is self-sufficient in this commodity. Where the year of data does not conform to the year noted in the heading, the same is inserted immediately after the respective figure and put in parentheses. The two dots (..) mean the figure is not available. E means the country has surplus for exports.

^bThe final-year figures for Brazil are for 1965 (for India for 1966) unless otherwise stated.

^cThe figure for India pertains to "land reclamation".

^dBetween 1949 and 1963, and in millions of hectares.

^eThis is the value of agricultural machinery alone. The total value is much higher but is not available in value terms.

^fThe number of those who completed the courses.

^gApproximate figure.

^hThe first figure pertains to the technical staff of the then Planning Ministry (mainly consisting of the economists); the second figure includes the personnel recruited (in the respective ministries other than the Planning Ministry) specifically for implementing the plans (such as the block development officers, gram sevaks and sevikas); the third figure includes the government extension staff (agricultural, panchayat, cooperative, animal husbandry and village industries); and the fourth figure includes an equivalent of one person per panchayat as the panchayats provide voluntary and/or paid services for the distribution of improved seeds, fertiliser, etc., and partly serve as instrument for the propagation, publicity and execution of the development plans. The above figures do not include the secretarial staff employed at the State Ministries, advisers, consultants and foreign scholars; the now-almost-obligatory role of the district and local executive branches of the government in helping the execution of the Five-Year Plans; the voluntary services of some of the political and social parties, and so on. The source of the figures of the Table: The Fertiliser Association of India, *Fertiliser Statistics 1964-65* (New Delhi, 1965), Table 7.2.

ⁱBrazil exports rice but imports wheat. But it exports more in rice than it imports in wheat.

- SOURCES FOR BRAZIL: 1. *Anuario Estatístico do Brasil* (annual).
 2. *Brazil 1951* (in Italian) and 1966 (in English).
 3. *Censo Industrial* (1950 and 1960).
 4. *Comercio Exterior do Brasil* (annual).
 5. UN, *Commodity Trade Statistics* (New York, 1965).
 6. UN, *Yearbook of National Accounts Statistics 1965*, (New York, 1966).

- SOURCES FOR INDIA: 1. Diverse sources including the one noted in Footnote ^a above; Meher D. N. Wadia, *Minerals of India* (New Delhi: National Book Trust, 1966); Indian Planning Commission, *Third, Draft Fourth Five-Year Plans* (New Delhi); *Statistical Abstract of India* (annual) and others.

TABLE III

DEFICIENCY OR ABUNDANCE OF MINERALS AND METALS,
INDIA AND BRAZIL¹

<i>Mineral or metal</i>	<i>India</i>	<i>Brazil</i>
I. GENERAL METALS AND MINERALS		
1. Bauxite	A	A
2. Corundum	A	..
3. Magnesite	A	A
4. Manganese ore	A (largest producer and exporter)	A (second largest producer and exporter in the world)
5. Monumental granite	A	A
6. Natural abrasives	A	..
7. Sillimanite and kyanite	A	..
8. Silica	A	..
9. Steatite	A	..
10. Iron ore	A	A
11. Mica	A	A
12. Rare metals and earths	A	A
13. Titanium ore	A	..
14. Thorium ore	A	A
15. Gold	S	A
16. Diamonds	D	A
17. Asphalt	D	D
18. Bismuth	D	..
19. Cadmium	D	..
20. Graphite	D	D
21. Lead	D	D
22. Mercury	D	..
23. Nickel and cobalt	D	D
24. Phosphatic materials	D	D
25. Copper	D	D
26. Phosphorus	D	S
27. Platinum	D	D
28. Potash	D	D
29. Silver	D	D
30. Sulphur	D	D
31. Tin	D	D
32. Tungsten	D	D
33. Zinc	D	D

TABLE III (Contd.)

<i>Mineral or metal</i>	<i>India</i>	<i>Brazil</i>
2. MINERALS AND METALS VITAL FOR DEFENCE		
1. Aluminium	A or S	D
2. Antimony	A or S	..
3. Coal	A or S	D
4. Chromium	A or S	A or S
5. Columbium	A or S	A or S
6. Copper	A or S	D
7. Iron ore	A or S	A or S
8. Magnesium	A or S	D
9. Manganese	A or S	A or S
10. Molybdenum	A or S	D
11. Mica	A or S	A or S
12. Tantalum	A or S	D
13. Titanium ²	A or S	A or S
14. Thorium ²	A or S	A or S
15. Uranium ²	A or S	A or S
16. Vanadium ²	A or S	D
17. Monazitic sand ²	..	A or S
18. Thorite ²	..	A or S
19. Thorogummite ²	..	A or S
20. Sodium urarate ²	..	A or S
21. Sulphate of rare earths ²	..	A or S
22. Graphite	D	D
23. Lead	D	D
24. Mercury	D	..
25. Nickel	D	D
26. Platinum	D	D
27. Potash	D	D
28. Sulphur	D	D
29. Tin	D	D
30. Tungsten	D	D
31. Zinc	D	D

¹A = Abundant and available for export.

D = Deficient and imports needed.

S = By and large, self-sufficient.

A or S = Available (abundant or self-sufficient).

.. = Information lacking.

²Nuclear materials, exports prohibited.

SOURCES OF DATA: See under Table II above.

TABLE IV

Commodity		India						Brazil											
		Exports			Imports			Exports			Imports								
		In US \$	% of total nat. exports	% of exports of UDC to DC's	In US \$	% of total nat. imports	In US \$	% of total nat. exports	% of exports of UDC to DC's	In US \$	% of total nat. exports	% of exports of UDC to DC's	In US \$	% of total nat. imports					
SITC code	Name	1961	1964	1961	1964	1961	1964	1961	1964	1961	1964	1961	1964	1961	1964				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
Total*		1149	1462	100	100	58.9	1908	2211	100	100	1403	1430	100	100	72.0	1460	1263	100	100
0	Food & live animals	375	456	33	33	5.2	257	435	13	20	935	921	67	64	13.0	193	286	13	23
011	Meat, fresh, chilled or frozen										8	14	1	1					
0111	Meat of bovine animals																		
013	Meat canned, etc.										15	9	1	1		3	12	0	1
02	Dairy products, eggs & honey						17	18	1	1									
022	Milk & cream: dried, etc.						28	12	1	1									
023	Butter															0	7	0	1

INDO-BRAZIL TRADE

[illegible]

TABLE IV (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
071	Coffee	16	23	1	2	.9					710	760	78	125	39.8				
072	Cocoa										61	46	4	3					
0721	Cocoa beans										46	35	3	2	25.2				
0723	Cocoa butter & paste										15	11	1	1					
074	Tea & maté	215	246	19	18	43.4					19	17	1	1	3.8				
075	Spices	51	46	5	3	60.7	3	1	0	0									
081	Fodder, n.e.s.	33	69	3	5	22.4					13	9	1	1	4.6				
08103	Oil-seed cake & meal, etc.	30	67	3	5						8			1					
1	Beverages & tobacco	26	45	2	3	.4	3	1	0	0	27	29	2	2	0.0			0	0
121	Tobacco, unmanufactured	25	42	2	3	10.6					27	29	2	2	11.4				
2	Crude materials, inedible, except fuels	208	244	18	18	RBNA ¹	227	219	11	10	320	356	23	25	RBNA ⁴	64	45	4	4
211	Hides & skins undressed	28	30	2	2	12.8					14	13	1	1	6.5				
221	Oil-seed, oil-nuts & oil kernels	8	3	1	0	1.5					8	1	1	0	1.5				
22102	Copra						16	11	1	1									
231	Crude rubber, etc.						18	10	1	0	6	5	0	0	.6			2	1

[illegible]

INDO-BRAZIL TRADE

[illegible]

TABLE IV (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
31304	Lubricating oils & greases						23	24	1	1						15	22	1	3
3324	Residual fuel oils										1	0	0	0		22	0	2	0
341	Gas natural & mfg.															11	14	1	1
4	Animal & vegetable oils & fats																		
412	Vegetable oils & fats	11	13	1	1	1.2	15	10	1	0	43	40	3	3	4.7	5	16	0	1
41211	Castor oil	10	12	1	1	3.1					(Presumably in 4)					5	13	0	2
4215	Olive oil	7	6	1	0	13.5					24	24	3	4	75.0				
422 ³	55101 ³ Other fix. veg. oils					8.7					28	29	2	2		5	8	0	1
4314	Waxes of animal or vegetable oils																		
5	Chemicals	14	17	1	1	11.8	157	159	8	7	20	18	1	1	16.8	146	148	10	12
511	Inorganic chemicals						23	24	1	1						26	29	2	4
512	Organic chemicals						39	36	2	2	11	11	1	1	RBNA ⁴	44	46	3	4
5121 ³	5122 ³ Hydrocarbons and their derivatives										11								
																4	5	0	0

INDO-BRAZIL TRADE

5125	Acids & their derivatives								8	13	1	1
5127	Nitrogen - function compounds								8	9	1	1
5136	Caustic soda								8	13	1	1
515	Radioactive & associated materials							4	0	0	0	RBNA ⁴
53	Dyeing, tanning and colouring materials											
		25	16	1	1				9	10	1	1
531	Synthetic organic dyestuffs, etc.											
		20	9	1	0				7	8	0	1
541	Medicinal & pharmaceutical products											
		2	4	0	0	1.7			10	9	1	1
54103	Antibiotics											
		6	3	0	0				3	2	0	0
561	Fertilisers mfg.											
		21	44	1	2				19	19	1	2
5611	Nitrogenous fertilisers other than natural, n.e.s.											
5613	Potassic fertilisers except crude salts											
									7	6	0	0
581	Plastic materials, etc.											
		14	11	1	1				7	7	0	1
59	Explosives & chemical materials, n.e.s.											
		26	21	1	1							

(Supposedly incl. in 59)

(Supposedly incl. in 599)

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65304	Fabrics of jute hessian cloth	274	381	24	27	100.7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

TABLE IV (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
68106 ^a	675 ^b Hoop and strips						9	10	0	0						4	3	0	0
68107 ^a	674 ^b Plates & sheets coated						19	28	1	1						0	19	0	2
68108 ^a	676 ^b Railway rails						19	1	1	0						6	7	0	1
68111 ^a	Railway track accessories						3	0	0	0									
68112 ^a	677 ^b Wire rods & wire						18	18	1	1						4	3	0	0
68113 ^a	678 ^b Steel tubes welded or drawn						13	18	1	1						8	6	1	0
68103 ^a	N.A. ² Ingots, etc., sheets & tin-plates bars						3	6	0	0									
68104 ^a	673 ^b Girders, bars, etc.						29	33	1	2						6	6	0	0
675	Hoop & strip of iron or steel															4	3	0	0
676	Rails, railway track material of iron, steel															6	7	0	1
677	Iron & steel wire excl. wire rod															4	3	0	0
678	Tubes, pipes & fittings of iron, steel															8	6	1	1

INDO-BRAZIL TRADE

[illegible]

73	Transport equip- ment	113	118	6	6	8	7	1	0	19.0	(Imports under SITC 731)
731	Railway vehicles	27	39	2	2					29	18 2 1
73101	Locomotives, steam	1	2	0	0						
73102	Locomotives, elec.	2	11	0	1						(Imports under SITC 731)
73103	Locomotives, internal com- bustion	5	21	0	1						
73107	Parts, excluding motors	9	4	0	0						
732	Road motor ve- hicles	58	58	3	3	5	2	0	0	11.9	25 25 2 2
73201	Passenger, other than buses, cycles	2	1	0	0					1	1 0 0
73203	Buses, trucks, lorries	2	3	0	0						(Supposedly under 733 & its components)
73206	Parts for cars	47	51	2	2						
7325	Road tractors for tractor trailers	} (Supposedly included in 732)									
7328	Parts for cars, buses, etc.										
733	Road vehicles other than motor									18 14 1 1	20 6 1 0
734	Aircraft					3	3		7.1	28 14 2 1	1 0 0 0

FOREIGN TRADE REVIEW

TABLE IV (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
73401	Aircraft heavier than air						2	0	0	0						18	7	1	1
73403	Parts of aircraft heavier than air						15	15	1	1						(Supposedly included in 73401)			
735	Ships & boats															41	6	3	0
8	Miscellaneous manufactured articles	18	32	2	2	18.8	38	39	2	2	1	2	0	0	1.0	36	35	2	3
841	Clothing except fur clothing	1	7	0	1	.8					(Supposedly incl. in 8)								
851	Footwear	4	7	0	1	4.9													
86	Scientific instruments, photographic equipment, etc.																		
861	Scientific instruments, etc.						14	17	1	1						27	24	2	2
862	Photographic, cinematographic supplies															17	14	1	1
89	Miscellaneous manufactured articles, n.e.s.	8	12	1	1	8.3	12	12	1	1						6	6	0	0
892	Printed matter	(Supposedly incl. in 89)																	
9	Commodities & transactions, n.e.s.	8	8	1	1	RBNA ⁴	12	11	1	1	12	5	1	0	RBNA ⁴	4	2	0	0

TABLE V

ALTERNATIVE MEASURES OF THE EFFECTIVE RATES OF PROTECTION,
INDIA, 1965-1966¹

Input-output industry		Nominal tariffs ad valorem	Effective tariffs					
			Measure 1 ²		Measure 2 ³		Measure 3 ⁴	
No.	Name		ad valorem ⁵	V/Q ⁶	ad valorem ⁵	V/Q ⁶	ad valorem ⁵	V/Q ⁶
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Construction	0.00	— .12		— .24		0.00	
2.	Electrical equip.	0.46	2.06		0.31		.27	
3.	Non-elect. equip.	0.25	.52		1.57		.88	
4.	Transport equip.	0.27	.46		.24			— .05
5.	Metal products	0.34	.99		.70		1.12	
6.	Iron and steel	0.27	1.76		1.14		.37	
7.	Iron ore	0.00	— .01		— .13		.62	
8.	Cement	0.00	— .26		— .36		.29	
9.	Non-ferrous metals	0.25	.67		.43		.27	
10.	Other minerals	0.25	.27		.09		1.63	
11.	Rubber	0.25		— .11		— .13		— .22
12.	Leather	0.25	.81		.55		21.37	
13.	Other leather prods.	0.25	.13		.12		.58	
14.	Leather footwear	0.25	.39		.17		.44	
15.	Animal husbandry	0.25	.44		.33		.19	
16.	Flour milling	0.00	— .06		— .19		— .90	
17.	Sugar	0.25		— .01		— .001		— .12
18.	Plantations	0.00	— .02		— .15		.35	
19.	Gur and khandsari	0.00	— .01		— .20		— .42	
20.	Vegetable oils	0.25	.31		— .62		1.23	
21.	Vanaspati	0.25	.64		.38		1.07	
22.	Salt	0.25	.37		.14		— .18	
23.	Starch	0.25		— .01		— .004	.30	
24.	Milk products	0.25	1.48		1.85		— .26	
25.	Breweries, etc.	0.25	.51		.22		3.07	
26.	Biscuits, etc.	0.00	— .23		— .34		— .58	
27.	Cigarettes, etc.	0.40	4.09		3.21		.06	
28.	Bidi	0.00	— .15		— .27		— .61	
29.	Other tobacco prods.	0.40	52.10		29.00		4.00	
30.	Fruit & vegetable preservation	0.25	2.92		1.18		— .65	

TABLE V (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
31. Cashewnut processing		0.91		— .23		— .27		— .009
32. Foodgrains		0.00	— .01		— .15		— .09	
33. Cotton		0.35	.40		.20		.55	
34. Cotton yarn		0.07	— .19		— .31		.83	
35. Cotton textiles		0.87		— .19		— .22	.09	
36. Jute		0.00	— .01		— .10		.48	
37. Jute textiles		0.25	2.71		1.97		.21	
38. Woollen yarn		0.25	.46		.24		— .07	
39. Woollen textiles		0.80	5.60		5.90			— .19
40. Raw silk		0.25	.77		.55		.00	
41. Silk textiles		1.00		— .16		— .19		— .018
42. Manmade fibres		0.25	.48		.17			— .140
43. Artificial silk fabrics		0.85		— .13		— .15		— .048
44. Other textiles		0.87	312.00			— .11	.27	
45. Oil-seeds		0.25	.28		.11		1.08	
46. Sugar-cane		0.00	— .009		— .15		— .10	
47. Tobacco		0.25	.26		.07		— .06	
48. Fruits, vegetables		0.00	— .006		— .14		— .27	
49. Other crops		0.00	— .002		— .16		— .03	
50. Fertilisers		0.00	— .17		— .78		— .36	
51. Ceramics, bricks		0.00	— .06		— .20		— .34	
52. Glass and glassware		0.25	.34		.15		— .20	
53. Wood products		0.20	.37		.17		.40	
54. Timber		0.07	.001		— .14		— .03	
55. China ware and pottery		0.25	.55		.32		— .39	
56. Wood (others)		0.07	.0004		.004		— .03	
57. Other forest prods.		0.07	.29		.10		— .06	
58. Motor transport		0.00	— .19		— .31		— .40	
59. Petroleum products		.16	.89		.62		.89	
60. Crude oil		0.07	.0003		— .101		1.07	
61. Rubber footwear		0.50	1.70		1.29		4.57	
62. Tyres and tubes		0.50	1.38		1.05		4.03	
63. Other rubber prods.		0.25	.27		.10		5.79	
64. Paper and paper products		0.62		— .03		— .03	.24	
65. Plastics		0.25	.52		.27			— .09
66. Dyestuffs		0.29	.395		.20		1.31	
67. Paints, etc.		0.25	.79		.53		1.68	
68. Insecticides, etc.		0.00	— .16		— .38		— .12	
69. Drugs, etc.		0.40	1.17		.85			— .26
70. Soap and glycerine		0.25	1.29		.94		.73	

TABLE V (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
71. Perfumes, etc.		1.70		— .34		— .39		— .47
72. Misc. chemicals		0.35		— .03		— .03	2.97	
73. Railways		0.00	— .103		— .23		1.38	
74. Electricity		0.00	— .113		— .22		.65	
75. Coal and coke		0.25	.27		.11		1.61	
Simple average		0.262	.587 ⁷		.351 ⁷		.9685 ⁷	
Weighted average ⁸		0.075	.193		.1114		.4092	

¹The nominal tariffs for the industries given are the averages of the component industries. (See the text.) For a number of industries, an average tariff of all the internationally traded commodities was used. The services like electricity, railway transport services, motor transport services, postal services, and the like cannot be imported. The effective rates of protection have, however, been calculated for these sectors also, merely for the completeness of the table of sectors. Nevertheless, the calculated rates show the effects of the import duties on the material inputs and so the cost of production of these services. It is useful in making efficiency comparisons amongst the domestic industries. The production of electricity, e.g., requires machinery which is subject to about 27 per cent import duty. The effect of this on the price of electricity may influence the costs of those industries that use electricity.

²This measure was computed from Relation (5). In other words, this measure assumes the domestic prices to rise over the world prices exactly by the amount of the tariff.

³This measure was computed from Relation (6). In other words, this measure allows for the reduction in tariffs resulting from the average overvaluation of the rupee during the year 1966. For this purpose, the post-devaluation price of the rupee was used. This was to be around 16 per cent above the official rate and was determined from a study of the free-market (or black-market) rates at Hong Kong. These rates are published in the *Weekly Eastern Economist* (Hong Kong).

⁴This measure was computed from Relation (7). In other words, this measure is based on direct price comparisons. The calculations from Relation (8) could not be made as the average excise tax rates were not handy at the time of writing this paper.

⁵Those industries for which τ_j remains undefined, i.e., for which $V \leq 0$, are not included in this column.

⁶The industries for which value added at world prices turned out to be negative are included in this column. The figures signify the value added at world prices as a percentage of gross output at domestic prices, viz., V/Q . The absolute values of these figures reflect the degrees of inefficiency of the industries concerned.

⁷Excluding the industries which have negative value added at world prices and industries Nos. 29: Other tobacco products and 44: Other textiles, the industries Nos. 29 and 44 having very high effective tariffs but value added (weights) so small as may be ignored.

⁸Weighted by value added, and not by the value of tariff revenues or import values. This weighted average includes the zero-tariff commodities also. For this measure, Industry No. 32 (foodgrains) was omitted as with the high weight that it has in total GNP and with the calculated negative effective tariff, it dominated the tariffs of all other industries and appeared to impart a wrong impression of the weighted average tariffs.

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THE STRUCTURE OF INDIA'S EXPORT TRADE*

By J.A. Rosario

THE OBJECT of this paper is to focus attention on certain changes that occurred in the structure of India's export trade over the period, 1951-52 to 1965-66. The structure—commodity composition and direction—of a country's export trade is basic to an understanding of why that country's exports behaved in the way they did. In general, the greater the similarity of structure of a country's export trade to that of world trade, the greater the likelihood of that country participating equally in the growth of world trade. Structure alignment by itself, however, does not ensure growth nor does dissimilarity necessarily retard the growth of a particular country's (or group of countries') export trade. Several factors explain why one country experiences a higher or lower rate of growth than another with similar export trade structure.

This paper examines the composition pattern in terms of the Standard International Trade Classification (SITC) sections and three-digit divisions. Comparisons between countries and through time in terms of these divisions have limited utility, because they embody commodities which, though of similar nature, have fared very diversely in world trade. For example, though bananas, on the one hand, and citrus fruits, apples and pears, on the other, are included in the three-digit division, 051—fruits and nuts, the rates of growth in international trade differed substantially as between them. Such comparisons would be meaningful only if the breakdown went much further, say commodity by commodity. But in studying structural changes in Indian exports only over time, the ease with which commodities can be identified within the classification obviates the above drawbacks. What the comparison between Indian and world exports in terms of broad commodity groups brings out is the contrast between expectations, the administrative measures designed to bring about these and the real events.

The direction structure is also an important determining factor of export performance, though it is to a great extent itself a result of commodity composition. Political and social factors do play an important role in direction of trade. The recent growth of trade

*My grateful thanks are due to Prof. D.T. Lakdawala for his valuable comments and suggestions in the preparation of this paper.

between the socialist countries of Europe and India¹, the UAR and Cuba is a case in point. A separate paper is needed to do justice to the direction structure, so the present paper does not deal with it.

I

PRIMARY PRODUCTS AND MANUFACTURES

The most general pattern adopted in analysing composition structure is the division of trade into Primary Products and Manufactured Articles. In terms of this classification, world trade underwent a particularly drastic change over the past decade and a half. This change has been in a direction much unexpected in the literature on trade and growth developed in the pre-1950 decades. Rapid growth of industrialisation was expected to have an adverse impact on the growth of international trade. Hicks² argued that technical change was biased in favour of import substitution. Industrialisation, others argued, would lead to a pursuit of autarky. Folke Hilgerdt, in his pioneering work, *Industrialisation and Foreign Trade*, found that whereas world production of manufactures increased by over 460 per cent between 1886-90 and 1926-29, world trade in these commodities increased by only 224 per cent.³ Though Hilgerdt himself considered this lag as being partly explained by commercial policy measures, it undoubtedly helped in the prognostication of the declining role of foreign trade in economic development.

It may, however, be noted that world trade in manufactured articles has been extremely dynamic and that its contribution to economic growth has assumed increasing significance. World output (volume) of all commodities is estimated to have increased by 87 per cent over the twelve-year period, 1953 to 1965. World trade, on the other hand, increased by 128 per cent over the same period. Breaking these into primary products and manufactured articles, it is found that the output from mining and manufacturing activity rose by 112 per cent as against only a 35 per cent increase in agricultural produce. World trade in primary products (including petroleum) rose by 88 per cent as against a 178 per cent increase in the case of manufactured articles. The result of these relative rates of growth in world trade was that manufactured articles, accounting for 46.6 per cent (\$36.5 billion) in 1953, increased their share

¹Rosario J.A.: "India's Trade with the Socialist Bloc", *The Economic and Political Weekly*, October 28, 1967.

²Hicks, J.R.: "The Long-Run Dollar Problem", *Essays in World Economics*, Oxford, Clarendon Press, 1959.

³League of Nations: *Industrialisation and Foreign Trade*, Geneva, 1945.

to 60 per cent (\$110 billion) in 1965⁴. In the period of a little more than a decade, the pattern of international trade underwent a radical change. The impact of this rate of growth and composition of trade on economic development has far-reaching implications.

The change in the structure of world trade, referred to above, definitely signals the need for adjustments in exports of a country over the long run. As guide-posts, in the short run especially, these have limitations. Apart from time lags in adjustments of the production structure, the disparity of trends in the trade of individual commodities within groups may itself hinder or promote the need for such adjustments. While the category, primary products, grew at a rate well below that of manufactures, the rate compares very favourably with the rates in earlier decades. Moreover, among primary products, the rates of growth have been very diverse. For example, imports of raw materials into 15 industrial countries, which account for three-fourths of the world imports of such commodities, show that agriculture-based raw materials, which formed 50 per cent of total raw material imports in 1953-55, declined to 34 per cent by 1964, with natural fibres receiving the brunt of the setback. Imports of synthetic rubber and fibres, however, grew by 270 per cent, of iron ore by 170 per cent, and of timber and pulp by about 100 per cent. The rates of growth of several primary products are well above those of manufactured goods as a whole. In the case of "food articles and beverages", high quality edible nuts, coffee, wines, dairy products, beef and veal, etc., tended to fare far better than foodgrains, spices, tea, etc. In the case of manufactured articles, the divergence of trends has been equally sharp. While articles with low value-added components such as textile products, rubber manufactures and glass-wares grew at limited rates, machinery, transport equipment and non-basic chemicals recorded rates of growth well above those for manufactures as a whole. It is, therefore, evident that such broad classifications have limited utility for commercial policy purposes. The analysis must necessarily be extended into details, commodity-wise, if fruitful long-term policy decisions are to be evolved.

II

India's export structure is analysed here in terms of three-digit divisions (SITC), accounting for over 80 per cent of such commodities in each (SITC) section except in the case of raw materials where the coverage is only 65 per cent. This is followed by group comparisons (viz., sections 0, 1, 2, 3 and 4) between Indian and world exports. The data are presented in Tables I and II. In spite of the

⁴GATT: *International Trade 1965*, Geneva, 1966, Table 1.

limitations of such analysis, mentioned earlier, certain policy implications emerge, the main theme being (a) the gain in exports of primary products, (b) the need for greater concentration of promotional measures on exports of these commodities in the short run, and (c) the development of non-traditional manufacture exports from the long-term viability point of view.

Sections 0 and 1 (Food, Beverages and Tobacco)

Five commodity groups (more or less composed of five commodities) accounted for 95 per cent of food articles' exports in this section throughout the period 1951/52-1953/54 to 1963/64-1965/66*. The contribution of these commodities to India's total exports was sharply stepped up in 1954/55-1956/57, from 23 per cent to 31 per cent. This share was more or less stable thereafter.

On the supply side, the process of economic development starting from a relatively very low income base and population growth, on the one hand, and a low rate of growth in agricultural output, on the other, exportable surplus in food articles tended to be restricted. On the demand side, world imports of food articles recorded the lowest rate of growth (as compared to other sections) over the period analysed (see Table II). Low income and price elasticity of demand and the drive towards agricultural self-sufficiency enforced through protectionist measures are the more important trade restricting factors. That these factors did not operate so as to lower the proportion of food articles in exports from India over the 15-year period is due largely to (1) the commodity composition of India's exports under this section and the change in pattern over the period, and (2) the measures taken by the Government to promote exports of these commodities—both negative (removal of controls, lowering export duties, etc.) and positive (tax concessions).

At the outset (see Table I), exports of this section were dominated by tea and spices only (81 per cent). By the end of this period, a drastic fall in their share (56 per cent) is observed despite the fact that tea alone contributed 38 per cent (Rs 42 crores) of the growth in exports of this section. The expansion is largely a result of commodity diversification. Sugar, coffee and animal-feed, which in 1951/52-1953/54 accounted for a mere 2 per cent (Rs 3 crores) of food exports, increased their share to 27.2 per cent (Rs 68 crores) by the end of the period. Exports of fruits and nuts (cashew kernels) were marked up steeply from Rs 12 crores to Rs 28 crores. Recently, several items of the food category, though presently contributing small earnings, have emerged as rapidly growing export commodities.

*Three-year averages.

They are more in the nature of speciality goods, peculiar to India and the surrounding area, viz., canned fruits and juices, curry pastes and powders, pickles, fish and marine products (shrimps, frog-legs, etc.) and vegetables in fresh and preserved form among others. At present, the unorganised production structure, inadequate transport and preservation facilities and, above all, the absence of organised export efforts until recently are obstructing factors. Given the requisite corrective measures, substantial increases in exports of these products could be realised.

The share of beverages and tobacco (section I) in our export trade remained more or less stable, though absolute value increased by almost 40 per cent. The section is almost entirely dominated by unmanufactured tobacco. Manufactured tobacco (cigarettes and cigars) still form a very small proportion of these exports.

Few of these products can be termed as essential food articles, considering the standards of living in India, in general, and food consumption habits, in particular. Relatively small proportions of the output of a number of these commodities—tea, coffee, cashew kernels and pepper—are domestically consumed. Where domestic consumption has tended to curtail exportable surplus, the Government has either provided incentives for exports or discouraged domestic consumption through fiscal devices. In the case of certain commodities such as sugar, coffee, oilcakes and animal feeds, the Government has encouraged exports even though increasing proportions (or the whole of output) could have been domestically absorbed.

In the case of certain commodities, coffee, for instance, international quotas restrict exports or the product is absorbed in relatively small proportions for economic reasons (fodder is far cheaper than oilcake and meal). It will, however, be observed that in general where exports meet with less opposition from domestic demand pull, the Government has taken promotional measures; the policy is weak and vacillating in those cases (vegetable oils and oil-seeds), where opposition is likely to be sharp. A major part of the expansion of food articles from India is due to commodity diversification.

Sections 2 and 4 [Crude Materials (inedible) except Fuels; Vegetable and Animal Fats and Oils]

Six raw material groups (section 2 only) accounting for 60 per cent to 65 per cent of our total exports of these commodities are listed in Table I. Export receipts from this section, though they rose by 25 per cent over the period, remained more or less stable (17 per cent) as a proportion of total exports.

The industrialisation that occurred over the period leads one to the expectation that these products would decline in relative importance in India's export trade. An increasing proportion of raw materials is expected to be exported in finished and processed form, once industrialisation gets under way. The tendency of exporting raw materials and importing finished products, a feature of pre-industrial economies, is also expected to be reversed with industrialisation. That this did not, in fact, occur in the case of India is the result of other factors. Either industrial production of these commodities failed to keep pace with the output of their raw materials or the export composition structure was altered in favour of new raw materials with exportable surplus. The non-listed commodities (Table I), it must be mentioned, is a very heterogeneous group; over the period of our analysis, their exports gained slightly, i.e., from Rs 41.3 crores to Rs 47.4 crores. Some of these commodities (lac, natural gums and resin, and mica) have been adversely affected by the development of synthetic and substitute materials or technical change.

In the commodities listed, a considerable degree of structural change occurred. Metallic ores and concentrates, which in 1951/52-1953/54 contributed 23.6 per cent of raw materials' exports, increased their share to 38 per cent by the end of the period. It may be noted that of the total increase in export earnings of Rs 27 crores from this section, ores alone were responsible for an increase of Rs 25 crores. Within the ores group, non-ferrous ores (mainly manganese ore) suffered a sharp setback in their share, i.e., from 20 per cent to 9 per cent. Apart from the fact that world trade in manganese ore expanded at a rate relatively lower than that in others, several factors were peculiar to India, namely, (1) shift in American demand to Latin America for reasons of propinquity and military strategy, (2) emergence of the USSR and Africa as major competitors in European markets, and (3) entry of the STC (then) is reported to have been adversely received by importers (debatable!). On the other hand, iron ore, which at the outset of the period, accounted for a mere 3 per cent of these exports, earned as much as 29 per cent by the end of the period. Apart from expansion in exports under long-term agreements with Japanese steel combines and the East European countries, the growth is partly statistical. Since 1962 (inclusive) exports of iron ore from Goa (which then accounted for twice as much as exports from India) are incorporated in India's trade figures.

The exports of other listed commodities, which are entirely agriculture-based, recorded a sharp fall from 38 per cent to 29 per cent of section 2 (the absolute fall in exports being from Rs 42 crores to Rs 37 crores). Raw cotton was affected the most adversely,

its share having fallen from 21.5 per cent to 10.9 per cent over the period. India was at one time—pre-planning era—an important exporter of groundnuts, linseed, castor-seed and their oils. The rise in domestic demand over domestic supplies of edible and non-edible oils has now made India a major importer of vegetable oils and oil-seeds. Raw jute exports faced a similar situation after the partition of the country. Exports of hides and skins were similarly affected.

Exports of *Mineral Fuels, Lubricants, etc.* (section 3) from India have been of relatively very little consequence in our export trade. Export of coal to neighbouring regions tended to decline.

Comparisons of exports of these primary products from India with those of the world over the period, 1953 to 1964-65, make interesting reading (Table II). World exports of primary commodities (i.e., SITC sections 0, 1, 2, 3 and 4) increased by almost 100 per cent between 1953 and 1964-65. India's exports of these, however, rose by only 65 per cent. Whereas in the case of world trade, the share of primary products declined from 50.2 per cent to 40.3 per cent*, in the case of India it rose from 50 per cent to 54.2 per cent. Among these primary products, food articles suffered a severe setback in world trade with a decline in their share from 22.4 per cent to 17 per cent. In India, a contrary movement occurred, for their proportion increased from 28.8 per cent to 34 per cent. Food articles became twice as important in India's trade (34 per cent) as in world export trade (17 per cent). The higher rate of growth in world trade is explained by the sharp increases in certain food articles (dairy and milk products, meat, wines, fruits and nuts, coffee and cocoa) in which India does not participate or where its contribution is insignificant. Again, the major commodities in India's exports of food articles (tea and spices) witnessed a comparatively low rate of growth in world trade; added to this, competitors in world markets increased their share at the cost of India.

Raw material exports from India maintained a more or less stable ratio to total exports over the years 1953 to 1964-65; in world trade, however, the ratio of raw materials to total exports fell from 17.5 per cent to 13.6 per cent. The rates of growth as between world and Indian exports of raw materials differed sharply, the rate being 36 per cent in the case of the latter as against 92 per cent in the case of the former. As noted earlier, the structure of world trade in raw materials underwent a radical change over the period. Except for iron ore, India could not participate in any of the dynamic growth-oriented raw materials entering world trade. In fact, many of the

*See note in Table II.

traditional raw material exports from India (cotton, jute, vegetable oil and oil-seeds, wool, and hides and skins) were such that the growth in their output failed to keep pace with the growth of domestic industries, and hence these assumed substantial proportions in imports. While plans to set up the petro-chemical complex of industries have yet to materialise, they may be able to provide substantial outlets for exports of such dynamic raw materials as synthetic fibres and plastic raw materials. As regards mineral fuels, these recorded the highest rate of growth in world trade of primary commodities; India, however, is largely dependent on their imports.

Manufactured Articles (SITC, Sections 5, 6, 7 and 8)

As mentioned at the outset, India's exports of this group of commodities exhibited a trend contrary to expectations of Indian planners as well as to the evolution of world trade structure. Considering the rapid growth and diversification of industrial output in India over the past decade and a half, this was extremely surprising. Developing countries with relatively cheap labour resources are expected to have comparative cost advantages in certain lines of manufacture where the value-added component is relatively low.

Table I shows that manufactured goods formed 49 per cent of export earnings in 1951/52-1953/54 (50 per cent in the previous three-year average). This proportion fell drastically to 42 per cent for the following six years' average. Thereafter, though it gained a few points in the ratio to total exports, it now accounts for only 45 per cent of total exports. The result is that the rate of growth in manufactures has been lower than that in primary goods exports from India. Going further, it is found that manufactured goods' exports under section 6 (constituting 80 per cent of all manufactured goods' exports) which depend largely on domestic raw materials, also partly exported, increased by only 17 per cent as against an increase of 25 per cent in all raw material exports. This perversity is not as great as it appears to be at first sight. Firstly, the base year price situation tends to partly distort growth rate comparisons as between primary products and manufactures. During the base period—post-Korean boom and general shortages in world markets—cotton manufactures, jute textiles and leather showed very high export receipts. Secondly, there has been a change in the structure of our raw material exports. As already mentioned, the growth in raw material exports was almost entirely due to growth in exports of mineral ores and concentrates. In food articles, diversification was the major growth factor. Manufactured articles, on the other hand, remained concentrated in such lines as witnessed a relatively low rate of growth in world trade.

Exports of all manufactured goods from India are overwhelmingly concentrated in section 6; this section is further dominated by

textile materials—jute and cotton. The rest of the manufactures falling under sections 5, 7 and 8, though they almost doubled their contribution to total exports, i.e., from 2.8 per cent to 4.3 per cent, over the period analysed, yet form only a small proportion of total export receipts.

Section 6 (Manufactured Articles Classified Chiefly by Material)

Over the years, 1951/52-1953/54 to 1963/64-1965/66, textiles, which accounted for 85 per cent of these commodity exports, declined marginally to 78 per cent. As a proportion of all manufactured goods exports—SITC sections 5, 6, 7 and 8—standard textile products declined from 80 per cent to 70 per cent. Diversification, in the form of non-textile exports, has been very limited. Leather, which is an important export item, maintained a more or less stable share in exports originating under section 6 (8 per cent to 8.5 per cent).

Considering the commodities not listed under section 6 in Table I, we find that their share increased from only 6.3 per cent to 14 per cent, i.e., from Rs 17.8 crores to Rs 46.2 crores. They contributed to more than 50 per cent of the total growth of export earnings in this section. Among the more important of such exports have been (1) precious stones and pearls, (2) iron and steel, and (3) manufactures of iron and steel such as structurals, wire products, nails and screws, the value of their exports having risen from Rs 25 lakhs to Rs 14 crores, Rs 70 lakhs to Rs 11 crores and from negligible to Rs 4.4 crores respectively.

Of the commodity groups listed in Table I under this section, however, it will be observed that there have been fairly drastic changes. Cotton textiles, which constituted 21 per cent of such exports at the outset (29 per cent in 1948/49-1950/51), declined to 17 per cent by 1963/64-1965/66. On the other hand, textile fabrics other than cotton fabrics increased their share in such exports from 31 per cent (27 per cent in 1948/49-1950/51) to 36 per cent, their exchange earnings rising from Rs 87 crores to Rs 118 crores. This expansion is largely the result of the growth in exports of hessian cloth and more especially carpet backing hessian cloth since the early 'sixties. Rayon and synthetic fibre fabrics, which at the outset of the period of our analysis hardly recorded any exports, made a small contribution since the late 'fifties with the introduction of the Special Export Promotion Scheme for them. Made-up articles, wholly textiles, other than cotton, which in 1951/52-1953/54 accounted for 29.5 per cent of exports under section 6, lost heavily in their share by the end of the period (20.5 per cent only). This fall is almost entirely accounted for by the decline

in exports of jute bags. With the growth of the Pakistani jute industry, its entry into world markets with the Export Bonus Voucher Scheme and its competitive advantage in raw material costs, Pakistan was able to oust India from almost all her traditional markets for this commodity. On the whole, losses in exports of certain textile products were offset by gains in others. The net result has been that exports of textile products increased by only about 7 per cent over the entire period.

Sections 5 and 7 (Chemicals, Machinery and Transport Equipment)*

These account for only 2.2 per cent of our total export receipts (Rs 17-18 crores). Chemicals exports are a very heterogeneous group of commodities, earnings from them having increased by only Rs 2 crores over the entire period. Essential oils, perfumes and flavouring materials, which accounted for 25 per cent to 30 per cent of chemicals exports remained more or less stable. The only noticeable increases in exports of these goods were in respect of chemical elements and compounds (Rs 1.4 crores to Rs 2 crores) and in medicinal and pharmaceutical products. The growth of the chemicals industry in India over the past decade has essentially an import substitution character. A cursory observation of the cost-price levels and relationship shows these as being wholly out of alignment with those of the major exporting countries. Being heavily protected and operating in a virtually unlimited domestic market, there is neither incentive nor compulsion to apply corrective measures. A factor that has been said to further restrict exports has been the nature of foreign collaboration particularly in this industry. The most dynamic group of chemicals in world trade based on the petrochemicals complex has still to be developed in India. In the circumstances, the poor export performance is easily explained.

Section 7

This section consists of exports, which are the product of the engineering industry. These exports expanded at a rapid rate, increasing from Rs 122 lakhs in 1951/52-1953/54 to Rs 833 lakhs in 1963/64-1965/66. Their contribution, as noted earlier, is still small. What is true in the case of the chemicals industry holds generally true of the engineering industry. However, the growth in chemicals

*These do not refer to the groups, chemicals and engineering goods, because they are generally used in the literature in India's export trade. These differ from the SITC classification adopted here. For example, steel metal, structurals, wires and nails are engineering goods as used in the export promotion literature; in our study they are included in section 6. One observes similar differences in the case of chemicals.

industry has provided less scope for exports than in the case of engineering goods. The redeeming feature of the exports of engineering goods under section 7 has been the wide dispersal of commodities over time; consumer durables, machinery of various types, limited quantities of transport equipment, etc., have participated in this trade.

While several interesting aspects of trade in these commodities are significant, the scope of this paper is rather limited. One aspect, however, needs specific mention. These industries were able to record a high rate of growth; the production pattern of manufacturing industries has undergone radical changes with the growth of these really dynamic industries. The Plan programmes consistently emphasise that there are bright prospects for their export, which would change our export structure. In order to achieve this, various incentives at both the production and export stages were introduced. Yet, over the fifteen years of planning, their impact on our trade has been of minor consequence. It must be recognised that exports of these commodities need to be nurtured from the very beginning at the production stage. The socialistic bias and political factors influencing our system of industrial licensing often introduce the first major drawback—sub-optimal capacity. Even under this set-up, underutilisation of capacity in several industries is observed. The style or design, the quality and utility-value of most consumer durables are domestic market oriented. Given the absorptive capacity of the home market and fully protected against competition from abroad, the sales and after-sale service organisation, so important in foreign trade, remains underdeveloped. Indiscriminate incentives, no doubt, brought about some expansion in their exports before devaluation. The question arises as to how far these are developments of genuine long-term export business. The trade has been largely in the hands of small traders interested in quick-high profits. The performance could hardly be used for long-term estimates when a rational system of export promotion is adopted. These factors have not been unimportant in what might have otherwise been a successful effort at diversification of our export trade in manufactures in a significant way.

We now examine briefly the comparative performance of India's exports of manufactured articles *vis-a-vis* world exports. As may be seen from Table II, world exports of manufactures increased by 194 per cent between 1953 and 1964-65 (average). Over the same period, India's exports of manufactures increased by 47 per cent. Exports of primary products from India grew at a much higher rate than manufactures.

Among manufactured goods, world trade recorded the highest rate of growth in chemicals (260 per cent), followed by machinery

and transport equipment (236 per cent). The combined share of these two sections in world trade accordingly increased from 22.1 per cent in 1953 to 30.7 per cent in 1964-65. These two groups of commodities alone accounted for over 36 per cent of the expansion in world trade over the period. India's participation in this trade was negligible, being less than 0.3 per cent in 1964-65. World trade in sections 6 and 8 increased at a comparatively low rate, but the rate of growth in exports of these from India was less than a third of that in world trade. It may be noted that in 1953, India's participation in world trade was the highest (2.65 per cent) in this category of goods; by 1964-65, this fell to 1.52 per cent and food articles (sections 0 and 1) got the first place (1.90 per cent of world trade in such products). The low rate of growth in world trade of these goods is largely the result of their being weighted in favour of low value-added commodities. The manufacture of these commodities is feasible in a relatively short period of time for developing countries. In countries, where these are already established and absorb substantial proportions of organised labour, these manufactures receive a high degree of protection from imports. World trade in textiles, therefore, increased at a rate well below that of manufactures as a whole. In 1950, textiles accounted for 20 per cent of world trade in manufactured articles⁵, by 1964-65 their share had dropped to less than 10 per cent. No doubt, the sections include some commodities such as paper and paper-board products and base metals which did record excellent growth rates. India has only recently started participating in exports of steel to any significant extent. As already observed, India's exports of these products are almost wholly dominated by textile products. Apart from trends in world trade of these, composition has been such that Indian exports of textiles have been adversely affected.

CONCLUSIONS

Over the period, 1953 to 1964-65, India's share in world trade suffered a sharp setback, falling from 1.54 per cent to 0.95 per cent. World trade recorded a consistently high and relatively stable rate of growth. The trends and patterns of world trade, emerging during this period, bear a distinct mark of industrial expansion in the advanced countries. Petroleum, metaliferrous ores, paper-pulp, synthetic fibres, etc., helped to sustain an otherwise relatively low rate of growth in primary products. These products, it will be observed, are directly linked to industrial development and technology.

⁵Maizels, Alfred: *Industrial Growth and World Trade*, Cambridge University Press, 1963, Table 7.1.

India's exports show no consistent upward trend; they moved up in spurts during 1959-60, 1962-63 and 1964-65. In each of these upswings, the contribution of a limited number of traditional exports and primary products is easily distinguished. The rate of industrial growth and commodity pattern of industrial output failed to alter the structure of our export trade. This was contrary to the ambitions of Indian planners.

In brief, the structure of India's export trade during the period, 1951-52 to 1965-66, had the following outstanding features:

I (a) Exports of primary products from India increased at a rate considerably higher than that of the manufactures group. (b) The increased earnings from commodities, which at the outset of the period contributed little to exports, added up substantially. (c) New products or those, whose earnings were initially insignificant, made large contributions by the end of the period. (d) Government policy has been helpful to these products only insofar as minimisation of restrictive measures at the exporting stage was undertaken.

II (a) Exports of manufactures increased at a rate much lower than that of primary products. (b) Manufactured goods exports from India continued to be dominated by textile material. (c) India participated most in those commodities, which in world trade experienced relatively the lowest rate of growth. (d) The most outstanding feature of our exports in these commodities was the change in the pattern of jute textile exports (fall in sacking, increase in carpet-backing and speciality goods), the addition of rayon and synthetic fabrics, woollen goods and ready-made textile products. (e) While metals—iron and steel and crude products of these—did make a noticeable contribution, engineering and chemicals goods, as a group, failed to make a significant impact on the structure of Indian exports, in spite of large subsidies by the Government.

There is clear evidence of a more diversified export trade emerging in the primary products group. This has helped in stabilising export receipts to a higher degree than at the beginning of the period. Spread over a wide range of products, the scope for promotional measures has been widened.

This analysis leads to the need for reconsideration of export strategy. Traditional products and newly added primary commodities have been the major expansionary force in our export trade over this period. Comparative cost advantage and natural resources have been the basis of these exports. These advantages have been

eroded in the case of some by factors beyond the control of producers. Small doses of incentives to exports of such products are likely to yield substantial gains in export earnings. Too much has been made of the low price and income elasticity of demand for these products; too little has been done to create increased exportable surplus.

The inbuilt obstacles to exports within the existing industrial structure cannot be removed in short periods of time. Added to this, the absence of wage-price stability will ensure that an even higher degree of subsidy would be needed for exporting products of non-traditional manufactures. Undoubtedly, there exists scope for effecting cost reduction and increased productivity even in the present set-up. Industrial licensing must in future give priority to export considerations, which in turn have several facets.

(Contd. on next page)

TABLE I
INDIA'S EXPORT TRADE: STRUCTURE

(SITC SECTIONS, 3-DIGIT DIVISIONS; 1951/52-1953/54-1965/66)

Section/Division/Commodity		(Rs lakhs)			
(1)	(2)	(3)	(4)	(5)	(6)
	1951/52- 1953/54 (Average)	1954/55- 1956/57 (Average)	1957/58- 1959/60 (Average)	1960/61- 1962/63 (Average)	1963/64- 1965/66 (Average)
0. Food					
0 (Food) as % of total exports	139.26	181.04	186.69	215.40	249.89
051 Fruits and nuts	22.7	30.6	30.8	32.8	31.1
061 Sugar	8.5	7.2	9.2	9.8	11.3
071 Coffee	1.2	0.7	3.1	5.7	7.6
074 Tea and mate	0.8	2.9	3.7	3.7	4.6
075 Spices	64.0	74.0	66.6	58.0	48.4
081 Animal-feed	17.0	8.5	5.4	7.4	7.5
Above divisions as % of 0	—	2.5	6.3	10.3	15.1
	91.5	95.8	94.3	94.9	94.5
1. Beverages and Tobacco					
1 (Beverages and tobacco) as % of total exports	16.79	12.95	15.48	16.53	23.33
121 Tobacco unmanufactured	2.7	2.2	2.6	2.5	2.9
122 Tobacco manufactured	81.1	89.8	92.2	94.1	92.4
	18.5	9.7	7.8	5.9	6.5

2. Crude Materials (Inedible) except Fuels (Rs lakhs)	107,53	108,04	112,30	113,67	134,41
2 (Crude materials) as % of total exports					
21 Hides, skins and furs (% of 2)	17.6	18.2	18.5	17.3	16.7
22 Oil-seeds, oilnuts and kernels "	6.2	6.1	8.0	8.7	7.1
262 Wool and animal hair "	3.9	2.3	1.4	4.0	1.6
263 Cotton "	6.4	9.6	10.1	6.9	5.9
264 Jute "	21.5	24.7	15.3	14.4	10.9
281 Iron ore and concentrates "	—	—	1.0	0.4	2.4
283 Non-ferrous metal ores "	3.3	6.1	10.7	15.9	28.7
Above divisions as % of 2	20.3	14.5	19.4	11.5	8.9
	61.6	63.3	65.9	61.8	65.5
3. Mineral Fuels and Related Materials (Rs lakhs)					
3 (Minerals, fuels, etc.) as % of total exports	10,92	8,15	9,94	6,60	9,78
	1.8	1.4	1.6	1.0	1.2
4. Animal and Veg. Oils and Fats (Rs lakhs)					
(Animal & veg. oils and fats) as % of total exports	18,98	25,23	11,44	9,98	10,84
412 Vegetable oils (% of 4)	3.1	4.3	1.9	1.2	1.4
	96.7	92.4	92.6	91.8	95.5
5. Chemicals (Rs lakhs)					
5 Chemicals as % of total exports	7,12	6,61	5,04	7,60	9,38
	1.2	1.1	0.8	1.2	1.2
6. Manufactured Goods (classified chiefly by material) (Rs lakhs)					
6 Manufactured articles as % of total exports	281,93	232,09	241,26	266,73	330,35
611 Leather (% of 6)	46.0	39.2	39.8	40.7	41.1
651 Textile yarn and thread "	8.4	9.3	9.7	9.1	8.2
652 Cotton fabrics (standard) "	3.6	3.8	4.6	5.0	4.7
653 Textiles fabrics other than cotton (standard) "	21.2	26.5	23.2	18.4	17.0
656 Made up articles—wholly textile other than cotton "	31.0	26.9	27.5	34.4	35.6
Above divisions as % of 6	29.5	26.2	20.2	22.8	20.5
	93.7	92.7	85.2	89.7	86.0

TABLE I (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)
7. Machinery and Transport Equipment (Rs lakhs)	1,22	1,37	2,09	3,97	8,33
7 (Machinery, etc.) as % of total exports	0.2	0.2	0.3	0.6	1.0
8. Miscellaneous Manufactured Articles	8,71	9,50	9,81	10,94	16,54
8 (Misc. mfrd. articles) as % of total exports	1.4	1.6	1.6	1.7	2.1
0, 1, 2, 3 and 4 total (Rs lakhs)	293,48	335,41	335,85	362,18	428,25
Above sections as % of total exports	47.9	56.6	55.4	55.2	53.4
5, 6, 7 and 8 total (Rs lakhs)	298,98	249,57	258,20	289,24	364.60
651, 652, 653 and 656 total (Rs lakhs)	240,47	193,50	182,09	214,95	256,86
Above divisions as total exports	39.3	32.7	30.0	32.8	32.0
Above divisions as % of 5+6+7+8	80.4	77.5	70.5	74.3	70.4
0-9 TOTAL EXPORTS (Rs lakhs)	612,56	592,58	606,77	655,81	802,67

(1) *Monthly Statistics of the Foreign Trade of India*. DGCIIS, Calcutta.(2) Thanawala, K.H.: *Statistics Relating to India's Foreign Trade*, Popular Prakashan, Bombay, 1967.

NOTE: The SITC trade classification has been in use in India since January 1957 only. Hence we have used source 2 above, where data for earlier years have been so classified.

TABLE II

WORLD AND INDIA: EXPORTS—STRUCTURE & GROWTH (SITC Sections, Select Years)

SITC sections	Exports from (2)	1953 (3)	1953 Structure (% of total) (4)	1956-57 (Average) (5)	1956-57 Structure (% of total) (6)	1964-65 (Average) (7)	1964-65 Structure (% of total) (8)	Percentage change 1953 to 1964-65 (9)
0 & 1	(a) India	322.1	28.8	410.0	31.9	579.0	34.0	+ 79.7
	(b) World	16,311.1	22.4	20,110.0	18.8	30,465.0	17.0	+ 86.7
	a as % of b	1.97		2.04		1.90		
2 & 4	(a) India	219.5*	19.6	266.4	20.7	299.0	17.5	+ 36.2
	(b) World	12,686.0	17.5	19,005.0	17.8	24,315.0	13.6	+ 91.6
	a as % of b	1.73		1.40		1.23		
3	(a) India	18.1	1.6	22.5	1.8	45.5	2.7	+ 151.3
	(b) World	7,460.0	10.3	12,155.0	11.4	17,450.0	9.7	+ 133.9
	a as % of b	0.24		0.19		0.26		
5	(a) India	11.6	1.0	12.4	0.96	23.0	1.3	+ 98.3
	(b) World	3,212.0	4.4	5,494.0	5.1	11,555.0	6.5	+ 259.7
	a as % of b	0.36		0.22		0.20		

TABLE II (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
								(Million \$)
7	(a) India	2.9	Neg.	3.6	Neg.	20.0	1.2	+589.6
	(b) World	12,872.0	17.7	20,755.0	19.4	43,265.0	24.2	+236.1
	a as % of b	Neg.		Neg.		Neg.		
6 & 8	(a) India	512.7	45.9	546.5	42.4	748.2	43.9	+45.9
	(b) World	19,349.0	26.6	27,880.0	26.1	49,355.0	27.6	+155.0
	a as % of b	2.65		1.96		1.52		
0-9	(a) India	1,117.4	100.0	1,287.4	100.0	1,704.0	100.0	+52.5
	(b) World	72,688.0	100.0	106,770.0	100.0	179,070.0	100.0	+146.4
	a as % of b	1.54		1.21		0.95		

* Exports of vegetable oils (i.e., SITC 4) in years 1952-53 to 1955-56 in \$ million were 57.4, 11.0, 45.5 and 76.3 respectively.

Figures for India are for fiscal year data (April / March).

- SOURCES: 1. 1953, data — Yates, Lamartine, P.: *Forty Years of Foreign Trade*, London, 1959 (for world trade data).
 2. Other years, UN: *Monthly Bulletin of Statistics* (for world trade data).
 3. K.H. Thanawala: *Statistics Relating to India's Foreign Trade 1948/49—1959/60*, Popular Prakashan, Bombay, 1967.
 4. *Monthly Statistics of the Foreign Trade of India*, DGCIS, Calcutta.

NOTE: The classification adapted by Yates is slightly different from that of the GATT publication referred to in the text of this paper (primary products and manufactures).

INDIA'S EXPORT TRADE IN UNMANUFACTURED TOBACCO—PERFORMANCE AND PROBLEMS

By P. Ramaswamy & H.T. Sapra

TOBACCO, besides being a source of income for more than two million people engaged in its production, trade and industrial utilisation, has been an expanding means of foreign exchange earnings for the country. As a traditional item of export, it has been consistently making a significant contribution to India's export earnings. In 1964-65, export earnings of the value of Rs 24.25 crores came from unmanufactured tobacco. During the next two years, however, there was a sudden fall in the exports of this product, the export earnings declining to Rs 19.58 crores in 1965-66 and further to Rs 18.58 crores in 1966-67. In terms of foreign exchange, the decline was more serious. From \$45.6 million (Rs 21.72 crores) in 1965, the earnings dropped to \$27.8 million (Rs 16.73 crores at post-devaluation rate for June to December 1966) in 1966. At present, when India is making a massive effort in diverse directions to build up a dynamic export trade for foreign exchange earnings needed for her economic development, a sudden drop in the earnings from a traditional item of export merits careful consideration and remedial action. A critical analysis of India's export performance in unmanufactured tobacco during recent years may, therefore, be useful in identifying the problems of its export marketing and in facilitating a clear appreciation of the impediments in the way.

I. EXPORT PERFORMANCE

GROWTH IN EXPORTS

During the last two decades there has been a phenomenal growth in India's exports of unmanufactured tobacco, resulting in a three-fold increase in the quantum of exports and a five-fold increase in their earnings. The rate of growth in the quantum, value and unit value of exports of unmanufactured tobacco during this period is indicated in Table I on the next page.

Table I indicates that there had been a continuous growth in the quantum of exports of unmanufactured tobacco since independence till the year 1964-65 when the exports touched a record figure of 781 lakh kg. as compared to 218 lakh kg. during the period,

TABLE I
 QUANTUM, VALUE AND UNIT VALUE OF EXPORTS
 OF UNMANUFACTURED TOBACCO

<i>Period</i>	<i>Quantum</i>		<i>Value</i>		<i>Unit Value</i>	
	<i>Lakh kg.</i>	<i>Index No.</i>	<i>Lakh Rs</i>	<i>Index No.</i>	<i>Rs/ Kg.</i>	<i>Index No.</i>
1945-46/1947-48	218	100.0	427	100.0	1.96	100.0
1948-49/1950-51	343	157.3	984	230.4	2.87	146.4
1951-52/1953-54	397	182.1	1,340	313.8	3.38	172.4
1954-55/1956-57	407	186.7	1,163	272.4	2.86	145.9
1957-58/1959-60	422	193.6	1,430	334.9	3.39	173.0
1960-61/1962-63	501	229.8	1,555	364.2	3.10	158.2
1963-64	633	290.4	2,101	492.0	3.32	169.4
1964-65	781	358.3	2,425	567.9	3.10	158.2
1965-66	566	259.6	1,958	458.5	3.46	176.5
1963-64/1965-66	660	302.8	2,161	506.1	3.27	166.8
1966-67	374	171.6	1,858	435.1	4.97	253.6

1945-46/1947-48, registering an increase of 258 per cent over the period. This trend was reversed for the first time in 1965-66 when exports suffered a major setback with their quantum dropping sharply by 215 lakh kg. During 1966-67, exports further declined by 192 lakh kg. Thanks, however, to the high level of exports in 1964-65, the average export quantum for the triennium ending 1965-66 was 159 lakh kg. more than that in the previous triennium.

As against an uninterrupted growth in the quantum of exports, the trend in respect of value has not been continuously in the upward direction. After a perceptible growth in the value of exports during the period, 1948-49 to 1953-54, there was a decline of Rs 1.77 crores during the period, 1954-55 to 1956-57, owing to a fall in the unit value. This was, however, followed by a continuous period of growing values till the record figure of Rs 24.25 crores was achieved in 1964-65. In 1965-66 and 1966-67, notwithstanding the increase in unit value, export earnings declined by as much as Rs 4.67 crores and Rs 5.67 crores respectively due to the heavy fall in the quantum of exports.

The unit value of exports of unmanufactured tobacco exhibits considerable fluctuations unlike the quantum and value of exports. From Rs 1.96 per kg. in 1945-46/1947-48, it increased to Rs 3.38 per kg. in 1951-52/1953-54. During the next four trienniums, the unit values increased and decreased alternately. The value per kg. of tobacco exported was the maximum (Rs 4.97) in 1966-67. It may be observed that but for this high unit value, which was the result of devaluation, the fall in export earnings in this year would have been more pronounced.

India's performance in the export trade of unmanufactured tobacco has not only been remarkable but her progress during recent years also compares favourably with that of the other leading tobacco exporters, as is brought out in the following Tables.

Table II shows indicators of expansion in the quantum of exports of unmanufactured tobacco from the major exporting countries during the years 1959 to 1966.

TABLE II¹

QUANTUM OF EXPORTS OF UNMANUFACTURED TOBACCO
FROM MAJOR EXPORTING COUNTRIES

(1959=100.0)

Year	World	USA	Rhodesia	Turkey	Bulgaria	Greece	India
1959	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1960	104.8	106.6	108.8	86.6	114.5	110.9	107.9
1961	112.1	107.6	118.8	131.3	104.8	120.0	126.3
1962	115.1	100.9	122.5	135.8	95.2	85.5	165.8
1963	115.5	108.5	121.3	67.2	138.7	112.7	178.9
1964	127.9	110.0	143.8	85.1	145.2	127.3	189.5
1965 ²	—	100.5	165.0	102.9	132.3	132.7	163.2
1966	—	118.0 ²	—	126.9 ³	—	147.3 ⁴	94.7 ²

¹Tables II to VI are based on data contained in the *FAO Trade Yearbook*, 1965.

²Based on data contained in the *FAO Monthly Bulletin of Agricultural Economics and Statistics*, Vol. 16 No. 6, June 1967.

³Based on data contained in *Tobacco Intelligence*, Vol. 19 No. 3, April 1967.

⁴Based on data contained in *Tobacco Intelligence*, Vol. 19 No. 2, March 1967.

Between 1959 and 1964, the quantum of world export trade in unmanufactured tobacco grew by 27.9 per cent. Compared to this, expansion in the export trade of India was remarkable. Table II indicates that during this period the export quantum of unmanufactured tobacco from India grew by as much as 89.5 per cent against a growth rate of 10 per cent for the USA, 27.3 per cent for Greece and 45.2 per cent for Bulgaria. The growth had been fluctuating in the case of Turkey.

In 1965, while the export quantum continued to grow in the case of Rhodesia, Turkey and Greece, it received a setback in the case of the USA, Bulgaria and India. In 1966, exports from India further declined by 68.5 points. In contrast, exports of the USA, Turkey and Greece registered an increase.

The growth in earnings from exports of unmanufactured tobacco from India has also been equally impressive. This is illustrated in Table III, which gives a comparative study of the value of exports relating to major exporting countries.

TABLE III
VALUE OF EXPORTS OF UNMANUFACTURED TOBACCO
FROM MAJOR EXPORTING COUNTRIES

(1959=100.0)

<i>Year</i>	<i>World</i>	<i>USA</i>	<i>Rhodesia</i>	<i>Turkey</i>	<i>Bulgaria</i>	<i>Greece</i>	<i>India</i>
1959	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1960	104.3	109.2	110.6	70.7	97.3	105.8	114.8
1961	106.0	113.0	125.5	94.6	83.6	120.3	114.8
1962	105.8	107.8	122.3	104.3	87.7	102.9	144.4
1963	119.4	116.5	136.2	72.8	135.6	171.0	177.8
1964	125.9	119.4	—	97.8	131.5	172.5	174.1

The value of India's exports grew by as much as 74.1 per cent during the six-year period, 1959-1964, as against a growth of only 25.9 per cent for the world as a whole. The only other exporting country to show such a high growth rate was Greece (72.5 per cent). By contrast, the growth in the value of exports was only moderate in the case of Bulgaria (31.5 per cent) and the USA (19.4 per cent). Turkey showed the same fluctuating growth in the value of exports as in their quantum.

How the unit values of exports of unmanufactured tobacco from the major exporting countries has moved during the years 1959 to 1964 may be seen from Table IV.

TABLE IV

UNIT VALUE OF EXPORTS OF UNMANUFACTURED TOBACCO
FROM MAJOR EXPORTING COUNTRIES

(1959=100.0)

<i>Year</i>	<i>World</i>	<i>USA</i>	<i>Rhodesia</i>	<i>Turkey</i>	<i>Bulgaria</i>	<i>Greece</i>	<i>India</i>
1959	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1960	99.2	102.4	101.7	81.8	84.7	96.0	107.0
1961	95.0	104.9	105.1	72.3	79.7	100.8	91.5
1962	95.9	106.7	99.2	76.6	91.5	120.8	87.3
1963	103.3	107.3	111.9	108.8	97.5	152.0	100.0
1964	98.4	108.5	—	115.3	90.7	136.0	91.5

Fluctuations in the unit value of exports are generally associated with agricultural commodities. This is equally true of unmanufactured tobacco, as is borne out by the data in Table IV. The unit value of exports of all the exporting countries excepting the USA has fluctuated from year to year. In the case of the USA alone, the unit value increased steadily, registering a growth of 8.5 per cent in 1964 over that in 1959. The US tobacco is generally more expensive not only because of its better quality but also because of domestic farm price policies, which aim at ensuring remunerative prices to producers. It is interesting to note that during this period of increase in the unit value of exports, there had also been a continuous increase in the support prices of tobacco in the USA.

As regards India, the movement of unit value over the period was rather erratic. A growth of 7 per cent in the unit value in 1960 was followed by a substantial decline during the next two years. In 1963, the unit value improved to the base year level, only to fall again by 8.5 points in the following year. This trend indicates that unlike the growth in the quantum and value of exports of unmanufactured tobacco from India during this period, the growth as regards the unit value has not been satisfactory.

We may now analyse the changes that have occurred over the years in the relative share of India in the world export trade in

unmanufactured tobacco. Competition in world trade in unmanufactured tobacco is restricted to a handful of producing countries. Further, exports of tobacco represent only a fraction of world output. While tobacco production is primarily for export in Rhodesia, Greece and Turkey, the greater part of the crop of some of the producing countries such as the USA, China, India and Pakistan is consumed at home and only a small portion is being exported.

Table V indicates the percentage share of tobacco exports from important exporting countries in the total world export trade.

TABLE V

PERCENTAGE SHARE OF THE MAJOR EXPORTING COUNTRIES
IN THE QUANTUM OF WORLD EXPORTS OF
UNMANUFACTURED TOBACCO

<i>Exporting country</i>	<i>1959</i>	<i>1960</i>	<i>1961</i>	<i>1962</i>	<i>1963</i>	<i>1964</i>
USA	27.5	28.0	26.4	25.1	25.8	23.6
Rhodesia	10.4	10.8	11.0	11.6	10.9	—
Turkey	8.7	7.2	10.2	10.7	5.1	5.8
Bulgaria	8.1	8.8	7.5	7.0	9.7	9.2
Greece	7.2	7.6	7.7	5.5	7.0	7.1
India	4.9	5.1	5.6	7.4	7.7	7.3
Others	33.2	32.5	31.6	32.7	33.8	47.0
World	100.0	100.0	100.0	100.0	100.0	100.0

Broadly speaking, the relative shares of the exporting countries did not change to any significant extent during the period, 1959 to 1964, India been the only exception with its share increasing from 4.9 per cent to 7.3 per cent (an increase of 33 per cent), placing her as the third important exporter. The overall importance of these six countries as exporters of unmanufactured tobacco was reduced in that their total share in the world exports declined from 66.8 per cent in 1959 to 53.0 per cent in 1964. Other changes that occurred during this period include an increase in the share of Bulgaria from 8.1 per cent to 9.2 per cent and a decrease in the share of the USA from 27.5 per cent to 23.6 per cent and of Turkey from 8.7 per cent to 5.8 per cent. The shares of Greece and Rhodesia had been almost constant.

The changes in the relative shares of the major exporting countries in the total value of exports may be seen from the data given in Table VI on the next page.

TABLE VI

PERCENTAGE SHARE OF THE MAJOR EXPORTING
COUNTRIES IN THE VALUE OF WORLD EXPORTS
OF UNMANUFACTURED TOBACCO

<i>Exporting country</i>	<i>1959</i>	<i>1960</i>	<i>1961</i>	<i>1962</i>	<i>1963</i>	<i>1964</i>
USA	37.2	39.0	39.7	37.9	36.4	35.3
Rhodesia	10.1	10.7	12.0	11.7	11.5	—
Turkey	9.9	6.7	8.8	9.7	6.0	7.7
Bulgaria	7.9	7.3	6.2	6.5	8.9	8.2
Greece	7.4	7.5	8.4	7.2	10.6	10.2
India	2.9	3.2	3.1	4.0	4.3	4.0
Others	24.6	25.6	21.8	23.0	22.3	34.6
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

During the period, 1959 to 1964, India's share in the value of world exports of unmanufactured tobacco increased from 2.9 per cent to 4.0 per cent. The share of Greece also increased from 7.4 per cent to 10.2 per cent. On the other hand, the share of the USA declined from 37.2 per cent to 35.3 per cent and that of Turkey from 9.9 per cent to 7.7 per cent.

India, which was the third important exporter in respect of quantum of exports, was relegated to the sixth position as regards the value of exports. This is attributable to the comparatively low unit value of export realised by India. In 1964, the average unit value of unmanufactured tobacco exported from India was the lowest (65 US cents per kg.) as compared with the unit value of tobacco from other countries as may be seen from the data given in Table VII.

TABLE VII

AVERAGE EXPORT VALUE OF UNMANUFACTURED
TOBACCO IN 1964

(US cents/kg.)

<i>Country</i>	<i>Value</i>
USA	1.78
Greece	1.70
Turkey	1.58
Bulgaria	1.07
India	0.65
World	1.19

SHIFTS IN THE DIRECTION OF TRADE

During the last decade, there have been some notable shifts in the direction of India's exports of unmanufactured tobacco, resulting in significant changes in the relative importance of different countries as importers of Indian tobacco. The share of some of the traditional importers has declined perceptibly while there has been a remarkable increase in that of some others, as may be seen from Table VIII.

TABLE VIII
DIRECTION OF EXPORTS OF UNMANUFACTURED
TOBACCO FROM INDIA

QUANTUM

Country	Average—Second Plan (1956-57 to 1960-61)		Average—Third Plan (1961-62 to 1965-66)		Percentage increase in Third Plan over Second Plan (Col. 4 over 2)
	Tonnes	Percentage share to total	Tonnes	Percentage share to total	
1	2	3	4	5	6
UK	19,202	44.5	16,721	27.6	—12.9
USSR	3,115	7.2	20,371	33.6	553.9
Netherlands	1,799	4.2	1,560	2.6	—13.3
Belgium	1,760	4.1	1,829	3.0	3.9
France	351	0.8	838	1.4	138.7
Singapore & Malaya	1,244	2.9	1,314	2.2	5.6
Hong Kong	906	2.1	490	0.8	—45.9
UAR	1,046	2.4	624	1.0	—40.3
Others	13,762	31.8*	16,814	27.8**	22.1
TOTAL	43,185	100.0	60,561	100.0	40.2

*which includes

China 10.7 per cent.

**which includes:

Aden 6.3 per cent

Japan 2.2 per cent

Poland 3.8 per cent

Hungary 1.2 per cent

Yugoslavia 4.5 per cent

E. Germany 2.9 per cent

VALUE

Country	Average—Second Plan		Average—Third Plan		Percentage increase in Third Plan over Second Plan (Column 9 over 7)
	Lakhs of Rupees	Percentage share to total	Lakhs of Rupees	Percentage share to total	
	7	8	9	10	11
UK	1,015.0	72.5	970.2	50.1	-4.4
USSR	48.3	3.5	473.7	24.5	880.7
Netherlands	27.6	2.0	28.4	1.5	2.9
Belgium	28.4	2.0	38.9	2.0	37.0
France	3.5	0.3	11.2	0.6	220.0
Singapore & Malaya	20.6	1.5	44.2	2.3	114.6
Hong Kong	11.3	0.8	8.2	0.4	-27.4
UAR	21.5	1.5	14.7	0.7	-31.6
Others	223.8	15.9*	347.4	17.9**	55.2
TOTAL	1,400.0	100.0	1,936.9	100.0	38.4

*which includes China 2.4 per cent.

**which includes:

Aden	2.9 per cent	Hungary	0.4 per cent
Japan	2.4 per cent	Yugoslavia	2.9 per cent
Poland	1.8 per cent	E. Germany	3.2 per cent

The most striking examples of shifts in the direction are a significant fall in India's exports to the UK and China and a phenomenal increase in her exports to the USSR and other East European countries. The share of the UK in the quantum of exports of unmanufactured tobacco from India decreased from 44.5 per cent during the Second Plan period to 27.6 per cent during the Third Plan period. In respect of value too, her share declined from 72.5 per cent to 50.1 per cent. Average exports to the UK during the Third Plan period were only 16.7 thousand tonnes valued at Rs 9.7 crores as

against 19.2 thousand tonnes valued at Rs 10.2 crores during the Second Plan period. In terms of percentage, this amounted to a fall of 12.9 per cent as regards volume and 4.4 per cent as regards value. In spite of this sharp decline, the UK continues to be the most important source of our export earnings from unmanufactured tobacco owing to her preference for the higher grades.

China, which accounted for 10.7 per cent of the quantum and 2.4 per cent of the value of India's exports of unmanufactured tobacco during the Second Plan period, ceased to have any share for obvious reasons.

Under the influence of bilateral trade agreements, there was a phenomenal growth in exports to the USSR (553.9 per cent), Poland (3.8 per cent), Yugoslavia (4.5 per cent) and German Democratic Republic (2.9 per cent). There were heavy shipments also to such new markets as Aden (6.3 per cent). Another notable feature was the re-entry of Japan into Indian market for purchase of unmanufactured tobacco after the lapse of nearly a decade. Exports to European Common Market countries have generally been static over the past few years. In Western Europe, the Benelux countries continued to constitute the only important market for Indian tobacco.

TYPES OF UNMANUFACTURED TOBACCO EXPORTED

India exports all the varieties of tobacco she produces, but the most important one is the flue-cured Virginia for which there is the greatest demand in world markets and of which she is the third largest exporter. Flue-cured Virginia accounts for as much as 80.63 per cent of the total quantum and 88.10 per cent of the total value of exports of all types of unmanufactured tobacco during the Third Plan period. Sun-cured Virginia, sun-cured *natu* and chewing tobacco were the other important types.

The changes that have occurred in the quantity and value of various types of unmanufactured tobacco exported from India during the last decade are given in Table IX on the next page.

Exports of flue-cured Virginia tobacco have increased from 35,000 tonnes during the Second Plan period to 48,000 tonnes during the Third Plan period showing a 31.8 per cent increase. In terms of value, the increase amounts to 39.6 per cent. Exports of sun-cured Virginia, sun-cured *natu* and *bidi* tobacco have also increased substantially. Exports of chewing tobacco have also shown some increase. There has, however, been a fall in the exports of cigar and cheroot tobacco.

TABLE IX

QUANTITY AND VALUE OF DIFFERENT TYPES OF UNMANUFACTURED TOBACCO EXPORTED FROM INDIA

Type	Quantity (tonnes)		Percentage increase	Value ('000 Rupees)		Percentage increase
	Average	Average		Average	Average	
	1956-57/ 1960-61	1961-62/ 1965-66		1956-57/ 1960-61	1961-62/ 1965-66	
Flue-cured Virginia	35,048	48,842	31.8	122,192	170,672	39.6
Sun-cured Virginia	970	2,864	195.3	1,880	6,579	249.9
Sun-cured <i>natu</i>	944	3,200	239.0	2,100	7,040	235.2
<i>Bidi</i>	49	167	240.8	103	539	423.3
Cigars and cheroot	40	18	(—) 55.0	118	84	(—) 28.8
Chewing	2,614	3,523	34.8	3,432	5,551	61.7
Hookah	13	59	353.8	51	189	270.6
Others	3,513	1,898	(—) 46.0	10,133	3,056	(—) 69.8
TOTAL	43,191	60,571	40.2	140,009	193,710	38.4

It is worthnoting that the exports of flue-cured Virginia tobacco have been increasing over the years not only in terms of absolute quantities but also in terms of percentage share of the production in the country, as is evident from Table X.

TABLE X

PRODUCTION AND EXPORTS OF FLUE-CURED VIRGINIA TOBACCO

	('000 tonnes)		
	Production	Exports	Percentage of exports to production
<i>Second Plan average</i>	63	36	57
1961-62	77	34	44
1962-63	95	53	56
1963-64	114	51	45
1964-65	95	72	76
1965-66	67	49	73
<i>Third Plan average</i>	90	52	58

2. PROBLEMS

It is envisaged that the exports of unmanufactured tobacco should go up to 70 million kg. by 1970-71. Although exports during the last three years have averaged 66 million kg. and there was a record export of 78 million kg. in 1964-65, attainment of this target may well prove to be a difficult task owing to a number of problems—some already existing and others likely to arise—in export marketing of unmanufactured tobacco. Coordinated efforts to tackle these problems in all their ramifications will go a long way in avoiding setbacks in the exports of unmanufactured tobacco.

PROBLEMS OF PRODUCTION AND EXPORT SURPLUSES

Production of tobacco in India has been fluctuating from year to year during the last fifteen years, as may be seen from Table XI.

TABLE XI
PRODUCTION OF TOBACCO IN INDIA

	Virginia	Others	Total	Percentage of Virginia to total
1950-51	44	217	261	17
1951-52 to 1955-56 (Average)	54	203	257	21
1956-57 to 1960-61 (Average)	63	229	292	22
1961-62	77	271	348	22
1962-63	95	271	366	26
1963-64	114	244	358	32
1964-65	95	251	346	27
1965-66	67	206	273	25
1961-62 to 1965-66 (Average)	90	249	339	27

After an initial increase during the first two years of the Third Plan, production decreased consistently in later years. In the case

of Virginia tobacco too, there was a significant decline in production during the last two years of the Third Plan. The share of Virginia tobacco, which figures most prominently in India's exports of unmanufactured tobacco, decreased from 32 per cent in 1963-64 to 25 per cent in 1965-66. The fluctuating trend in production tends to affect export surpluses and hampers the export effort, because a steady and continuous supply is an essential concomitant of a sound export trade. The problem of finding adequate export surpluses in the face of fluctuating production is further aggravated by a continuously increasing consumption within the country. Between 1951-52 and 1964-65, the consumption of tobacco by the Indian cigarette industry, which consumes mainly Virginia tobacco, crucial for India's exports, increased from 20.9 million kg. to 53.3 million kg. In 1966, consumption might have risen to 56 million kg. The increasing pull of domestic demand implies that internal production must be stepped up, if adequate and continuous export surpluses are to be ensured.

The production potential by the end of the Third Plan is estimated at 400 million kg. An additional production of 75 million kg. is envisaged as the target for the Fourth Plan so that by 1970-71 the level of production rises to 475 million kg. including 100 million kg. of FCV tobacco. Various measures have been proposed to achieve this target. Tobacco crop already enjoys certain facilities in the form of special quotas of fertilisers, close attention to other requirements and substantial supply of pure seeds and improved seedlings. A Centrally sponsored scheme also has been proposed for the development of flue-cured Virginia tobacco.

Attempts to boost the production of tobacco are, however, likely to be seriously impeded by a number of problems. An immediate one is the threat of a decrease in the area under tobacco in Andhra Pradesh, the leading tobacco-growing state. Much of the area under tobacco in Guntur district is expected to switch over to paddy cultivation in a year's time with the completion of Nagarjunasagar project. This possible loss should be neutralised by extension of area not only in Andhra Pradesh but also in Madras, Mysore, Gujarat and to a less extent in Maharashtra and UP. The red soil area in Nellore and Kurnool districts in Andhra Pradesh offers good scope for tobacco cultivation and should be put to the maximum use.

Low level of productivity is another problem in the production of tobacco in India. Various crop improvement programmes implemented over the years have no doubt helped in increasing the yield. From 7.5 quintals per hectare during the quinquennium ending 1952-53, the yield increased to 8.8 quintals per hectare in

1963-64, but the level of productivity in India is yet very low as compared to that in other producing countries. During the triennium ending 1964-65, productivity in terms of quintals per hectare was only 8.5 in India as against 23.0 in the USA and 11.4 for the world. Possibilities of achieving increased productivity by adopting sophisticated production techniques have clearly been demonstrated in India. The attempts during the years to come should be to obtain maximum results in this direction by a wider adoption of appropriate measures.

An enterprising and contented farmer is the starting-point for the success of any export effort in agricultural commodities, so there can be no better incentive to increased production than a remunerative price to the producer. According to official estimates, income from tobacco cultivation in Andhra Pradesh compares unfavourably with that from sugar-cane, banana and chillies. In respect of income, the export variety of Virginia is also in a bad way against the *natu* variety. The tobacco grower does not have adequate credit facilities as compared to the grower of other cash crops such as cotton and jute. On an average, he receives cooperative credit amounting to Rs 9.50 per acre even in the most important tobacco-growing areas. With such a meagre institutional finance, he has but to fall back on the sources of private finance which, besides being too expensive, goes generally to the larger grower.

It has been estimated that a tobacco cultivator hardly gets Rs 400 from an acre of Virginia tobacco, while the trade makes as much as Rs 3,000 on that much of produce. Since the prosperity of the export trade and the tobacco producer is interdependent, it will ultimately augur well for the trade if it shares a part of its profits with the cultivator. It is only then that the latter will have a stake in export trade and will continue to feed it in spite of occasional hazards. Minimum export prices for different grades of flue-cured tobacco, introduced by the Government of India since 1963, envisaged *inter alia* ensuring a reasonable minimum return to the producers. The full benefit of this policy, however, does not appear to have filtered down to the tobacco grower, because he generally does not resort to sorting of his produce into recognised grades before sale. He only adopts a sort of a *kutchra* grading and the traders offer prices after evaluating the quantity of different grades obtainable from the assorted bulk. Since the minimum export prices are fixed for the different Agmark grades, the producers, who do not grade their produce, often do not get prices commensurate with quality. The scheme for grading producer's tobacco according to Agmark grades before sale through cooperatives, introduced by the Directorate of Marketing and Inspection, aims at helping the producer in obtaining a just price for his produce.

PROBLEM OF SHIFTING CONSUMER PREFERENCES

Owing to distinct consumer preferences in different countries, particular types of unmanufactured tobacco are preferred by the industry in those countries. For example, the British market favours a light-coloured, fine-textured, mild, flue-cured Virginia-type leaf and West Germany prefers a well ripe open grained tobacco with a low nicotine content and thin body without much consideration for colour. The East European countries, on the other hand, are satisfied with good burning tobacco, particularly of medium and low grades.

The UK being the most important buyer of Indian tobacco, production, curing and grading of tobacco in India have been very much conditioned by the preferences in that country. During recent years, a definite shift in the type of tobacco preferred by the UK has taken place. The preference for the bright tobacco of the top grade is not the same as in the past, this having recently shifted from lemon to orange colour. There has also been a shift towards filter-tip and blended cigarettes, which require a lower proportion of higher quality in the blend. For successful export performance, India will have to keep a watchful eye on shifts in the consumer preferences of the UK, her most important traditional buyer, and so orient her production and grading pattern as to fully satisfy the British industry. Of late, many other countries are also showing keen interest in the purchase of Indian tobacco. If diversification of the export trade is to make a real headway, India will have to take note of the specific requirements of these countries as well.

Formulation of Agmark grades and grade standards for unmanufactured tobacco and enforcement of compulsory pre-shipment quality control in 1945 has been a decisive factor in pushing up India's exports of this commodity. From a mere 9.9 million kg. during the triennium, 1942-43/1944-45, a period just prior to the introduction of quality control, exports of unmanufactured tobacco shot up to 21.8 million kg. during the next triennium of 1945-46/1947-48. Since then, exports have continuously grown, reaching a record level of 66 million kg. during the three-year period ending 1965-66. This increase in exports is chiefly attributed to the remarkable improvement in the quality of tobacco shipments from India as also the reputation that Agmark grades have earned in the export market. The quality control scheme for tobacco is also flexible enough to take note of specific requirements of foreign buyers and the grade specifications are being modified as and when required. As an instance may be mentioned the introduction of a number of "composite grades" for cigarette tobacco to cater to the present needs of the UK market. Buyers in German Democratic Republic have also shown

a preference for the "composite grades" so that further mixing at the time of manufacture is dispensed with.

In originally prescribing Agmark grade specifications for FCV tobacco, the emphasis was on the colour of the tobacco although other factors of quality like texture, body and blemish were also taken into account. The main consideration at that time was the preferences in the UK, which was the most important buyer of Indian tobacco. Now that other countries are also showing interest in buying tobacco from India, and the quality preference in the UK has changed, there is need to examine the desirability of reviewing the grade specifications. In other leading tobacco-growing countries like the USA and Rhodesia, Virginia tobacco is graded on the basis of leaf position. The possibility of grading tobacco in India on this basis merits serious consideration.

PROBLEM OF DISCRIMINATIVE TARIFFS AND COMPETITIVENESS

Over the years, unmanufactured tobacco from India has enjoyed the advantage of price competitiveness. In fact, the average export price of Indian tobacco in the international market has been the lowest as may be seen from Table XII.

TABLE XII*

AVERAGE EXPORT PRICE OF UNMANUFACTURED TOBACCO

(US \$ per kg.)

Year	World	USA	Rhodesia	Turkey	Bulgaria	Greece	India
1960	1.20	1.68	1.20	1.12	1.00	1.20	0.76
1961	1.15	1.72	1.24	0.99	0.94	1.26	0.65
1962	1.16	1.75	1.17	1.05	1.08	1.51	0.62
1963	1.25	1.76	1.32	1.49	1.15	1.93	0.71
1964	1.19	1.78	—	1.58	1.07	1.70	0.65

*Based on data contained in FAO *Trade Yearbook*, 1965.

The competitiveness of Indian tobacco is further borne out by the fact that the value of imports of Indian flue-cured tobacco into the UK has consistently been the lowest as compared to that of the USA, Rhodesia and Canada. Devaluation of the rupee conferred a further price advantage on Indian exporters, though this was partly neutralised by the imposition of an export duty of 20 per cent *ad valorem*,

an increase in the internal prices of tobacco and a rise in the shipping freight. Absence of Rhodesia from the world tobacco market owing to political developments too offers a potential advantage to India. However, the advantages flowing from increased competitiveness of Indian tobacco are, to a great extent, nullified by discriminative tariffs in the importing countries. In fact, this is a handicap faced not only by India but by all the developing countries exporting unmanufactured tobacco. The acute vulnerability of tobacco exports of developing countries has been clearly brought out by Gerda Blau* in an analysis of the percentage shares of total primary exports from developing countries to the rest of the world, which are affected by different sets of influences. The entire exports of unmanufactured tobacco from the developing countries were affected not only by competition from exports from temperate zone developed countries but also by high revenue duties and other fiscal charges, differential duties and, to a less extent, by preferential agreements.

Indian exports of all types of tobacco are subject to a common external tariff of 28 per cent by the ECM, but in effect Indian tobacco has to face a levy averaging to 40 per cent due to an additional tariff clause, which prescribes a minimum of \$38 duty for 100 kg. of tobacco. Though the ECM at present accounts for only a small share of the Indian tobacco exports, this region happens to be India's most important market after the UK and the East European countries. The high level of tariff in the ECM has, therefore, been a matter of grave concern to India. With the accord recently reached at Geneva in the Kennedy Round negotiations and the tariff reductions offered, India should be in a position to increase her tobacco exports to the ECM countries.

At present, Indian tobacco enjoys a very wide margin of preference in the UK, which absorbs 40 per cent of tobacco exports from India, so the UK's desire to join the Six has posed a serious problem to India's export trade in tobacco. With the dismantling of the British tariff on imports from the ECM, the advantage that India now enjoys in the UK market would be transferred to the Community. Further, since the ECM tariff will be extended to Indian tobacco imported into the UK, India will be placed at a greater disadvantage. It is to be hoped that India's discussions with the UK Government on India's trade problems likely to arise from the eventual British entry into the ECM would bear fruitful results.

*"Commodity Export Earnings and Economic Growth", *FAO Monthly Bulletin of Agricultural Economics & Statistics*, Vol XII No. 9.

OTHER HANDICAPS

In addition to the major problems discussed above, there are certain other difficulties, which adversely affect India's export trade in unmanufactured tobacco.

The problem of excessive freight rates for tobacco was aggravated by a further rise in shipping freights in the wake of devaluation in June 1966. Besides, there has been a persistent opposition from the trade to the present system of deferred payment of freight under which a gross amount inclusive of rebate is first charged, the rebate being refunded later on.

Tobacco meant for export has often to be stored for long periods. If not properly stored, it deteriorates in quality. Under the Indian tropical conditions, the existing facilities for scientific storage of tobacco in India are utterly inadequate. This calls for establishment of suitable warehouses to take care of not only the present production but also the anticipated increases.

Another difficulty has been the irregular and inadequate supply of coal, so essential for flue-curing and redrying operations, to the curers of tobacco. Since only a very small quantity of coal is required for tobacco processing, it should not be difficult to arrange coal dumps in the growing areas to ensure adequate and timely supplies of coal for this purpose.

Under the Agricultural Produce Cess Act, a cess at the rate of half per cent *ad valorem* is levied on the exports of tobacco. This levy adds to the export cost, albeit to a small extent. Since tobacco is already subject to a heavy Central excise, this cess appears to be superfluous.

The paucity of foreign exchange for undertaking vigorous export promotion measures through market studies and display of goods has consistently been complained of by the exporters. The decision of the Government to permit a blanket release of foreign exchange to exporters earning more than Rs 50 lakhs per year from traditional export items is, therefore, a welcome step, which should help increase exports.

3. CONCLUSION

Unlike many other agricultural export products, which suffer from price disadvantage in the export markets, the Indian unmanufactured tobacco is placed in a happy position, its prices being not only competitive, but, in fact, the lowest as compared to those of the other major exporting countries. This price competitiveness, a *sine qua non* for the success of any export effort, offers great oppor-

tunities for the growth as well as diversification of tobacco exports from India. If this opportunity is to be fully exploited, the various problems faced by Indian tobacco export trade have to be tackled promptly and effectively. Left unattended, these problems may, in the long run, even nullify the present advantage of price competitiveness. The most serious of these, as has been seen above, is the problem of finding exportable surpluses in the wake of increasing domestic consumption. The realisation of the need to curb internal consumption, particularly of the better qualities of tobacco, is reflected in the steep increase recently in the excise duties on the cigarettes of better quality blends. Availability of the additional quantity of unmanufactured tobacco, expected to flow from the reduced domestic consumption, for the export market may, however, solve the problem of finding exportable surpluses only partly. The real solution to this problem, therefore, lies in making purposive and planned efforts aimed at extending the area under tobacco and raising the present level of productivity.

To be able to raise the level of production, it is imperative that the marketing system is so oriented as to offer the farmer an incentive to produce more. Under the present system of tobacco sales, a major part of profits is appropriated by the trade. In the USA, the principal method of marketing flue-cured and Burley tobacco in the major producing states is a system of warehousing auctions, by which the produce brought for sale by the farmers is auctioned after being assigned a grade by the Federal Inspectors. Establishment of an adequate number of auction floors in the various assembling centres in the main tobacco-growing regions in India and the extension of the scheme of grading tobacco at farmer's level through cooperatives to cover a wider area, would help the tobacco cultivator obtain a better return for his produce, which would serve as an incentive to augment production and yield per acre.

The shifting pattern of consumption in many countries including the UK warrants that adequate attention is paid to the quality of tobacco with an eye on the preferences of individual buyers. The quality of Indian tobacco is sometimes not wholly acceptable to the world market, impeding its ready sale and rendering it uncompetitive with tobaccos of American origin. Rhodesia in recent years has brought about such a remarkable improvement in the quality of her tobacco that she has not only gained much ground in the UK market but has also begun to replace American tobacco in the West European countries. Viewed against this, there is no reason why India should not be able to improve the quality of her tobacco with better methods of cultivation and application of modern techniques. Improvement in quality of the leaf, followed by a rational system of grading, which meets the requirements of the export market,

should impart to the Indian tobacco increased competitiveness in the traditional as well as new markets.

Recent developments in international trade in tobacco combined with certain others within India provide a new opportunity for expansion of India's export trade in tobacco. What is required at the moment is full exploitation of this favourable situation both by the Government and the export trade.

Exports from Rhodesia, an important exporter and competitor of Indian tobacco in the world markets, are now subject to an embargo as a result of trade sanctions against her. This has naturally created a vacuum in the importing countries to some extent. A prompt all-out effort by India to fill this gap, particularly in the UK market, is most urgently needed, for certain other countries are trying to capture the market lost by Rhodesia. For instance, Canada, which normally occupies the seventh or eighth position in the world tobacco export trade is, on the one hand, planning to raise her level of production of Virginia-type flue-cured tobacco by 25 per cent to 33 per cent over that of 1966 and, on the other, trying to persuade the British manufacturers to conclude a new purchasing agreement until 1969 or even longer. It would be a pity if Canada, which exports much less tobacco than India, steals a march over India in a market so vital for her due to the lack of an Indian initiative in the matter.

Devaluation of the British pound is also likely to affect adversely India's exports of unmanufactured tobacco. The UK is India's main market for this export product. Nearly 45 per cent of the UK's requirements is met by Indian tobacco. As Indian products will now cost more in Britain in terms of sterling, exports from India may be affected. Further, the new emphasis on cuts in consumer spending in Britain is not unlikely to affect the import of tobacco into the UK. The devaluation of the pound, by improving the chances of Britain's entry into the Common Market, also poses some long-term risks to India's exports. There is, therefore, an urgent need for a critical examination of the impact of the British devaluation on the competitiveness of Indian unmanufactured tobacco and for making suitable adjustments in the export duty to the extent necessary.

It has been reported that India is losing markets in Western Europe for low-grade tobaccos, prices of which are said to be uncompetitive. It is worthwhile to investigate the matter to find out how far prices of these grades need to be reduced in order to become competitive. Suitable adjustments in the minimum export prices of these grades may be made in the light of this investigation. Exports of unmanufactured tobacco to East European countries have been

fluctuating very widely. It will be useful to enquire into the causes for such fluctuations also.

The export potential of cigar tobacco also needs to be exploited. The USA, which purchased substantial quantities of cigar tobacco from Cuba, has in recent years shown interest in Indian cigar tobacco as a result of her strained relations with Cuba. Production of cigar tobacco in India, confined mainly to South Madras, is progressively declining due to the increase in cigarette smoking in the country. Efforts are being made in India to develop on a commercial scale the improved cigar tobacco to suit the American need. The British Government is making vigorous efforts to discourage cigarette smoking. A decision has been taken to control or forbid various cigarette sales promotion schemes. As a result, in the UK market also, there is likely to be increased demand for cigars and cigarillos due to the scare of health hazards from cigarette smoking. India should take advantage of this and adopt immediate measures to step up the production of cigar tobacco.

The rapid advances made by the Rhodesian tobacco industry during recent years as regards productivity increase, quality improvement and export expansion are attributed to a large extent to the existence of a single unified agency in the Rhodesian Tobacco Board to look after in an integrated and coordinated manner all the activities relating to production, research, development, marketing and export promotion. Possibilities of formulating a similar Board in India, as recommended by a seminar of Indian Institute of Foreign Trade merit serious consideration.

As a result of the favourable atmosphere created for Indian tobacco exports by the measures taken by the Government and by the political situation in certain countries, it should not be difficult for India to substantially augment the quantum of her exports, diversify her export trade and increase the earnings of foreign exchange so vital for her developing economy, provided concerted efforts are made jointly and severally by the Government, the export trade and the farmer to solve through State policy and private initiative the problems which impede the growth of exports.

EXPORT POTENTIAL SURVEY OF ANDHRA PRADESH*

UNTIL recently, the export promotion effort in the country was assumed to be the concern of the Central Government alone. The States evinced little interest in participating in and sharing the burden of developing the country's exports. While the Central Government is undoubtedly responsible for planning, directing, coordinating, implementing and controlling the export policy and programmes on all-India basis, active participation of the State Governments in the total export effort of the country is essential to strengthen this movement. A large number of exportable items, especially in the agricultural and agro-based sectors, as well as the production of small industries, fall in the category of State subjects. Concerted action to mobilise them for export purposes, where necessary, by according high priority to their production or by diverting them from local consumption, would have to be essentially undertaken at the level of the State Governments. There has been, of late, a growing awareness among many States of their responsibility in this matter and many of them have already initiated some measures to develop the export-base within their areas and to supplement the efforts of the Central Government, wherever possible.

The interest evinced by the various States for sharing the burden of export mobilisation has varied from State to State, depending upon their assessments of the contribution they can make to stepping up the country's exports. In certain States, State Export Advisory Committees have been set up while in some others, Export Promotion Departments have been set up. In a few States, the idea has been taken further and State Export Corporations for supplementing the efforts of the trade and industry in providing a channel for exports, particularly to the medium and small industries, by directly participating in the exports have been established. The Andhra Pradesh State also initially established a separate Directorate of Commerce and Export Promotion but later took a lead by setting up a separate Department of Commerce under the charge of a full-time Secretary.

Against these measures, a number of States have been feeling the need for examining and assessing the export potential of the

*Based on the *Report on Export Potential Survey of Andhra Pradesh*, conducted by the IIFT on assignment from the Government of Andhra Pradesh.

various commodities and products originating within them, the potential for processing them in order to exploit fully their exportability and the measures required for developing the competence as well as the organisational set up for the purpose. The Andhra Pradesh Government again took a lead by inviting the Indian Institute of Foreign Trade to undertake a comprehensive survey of the export potential of the State and to recommend specific lines of action to be taken to exploit this potential.

SCOPE AND COVERAGE

On a preliminary examination of the State Government's request, the Institute considered that the Survey should cover the following aspects:

- (a) Identification of the products which have immediate potential in export development;
- (b) examination of the opportunities for expansion of existing industries, which are already participating in the export effort, and of those manufacturing industries which are not exporting;
- (c) examination of the basic climate for a dynamic export marketing programme; and
- (d) determination of action required for the fuller exploitation of export potential of the selected commodities.

It was also decided, in consultation with the State Government, that the Survey should concentrate on (i) studying the prevailing resource base of the State in relation to exports, (ii) identifying the present and potential export products, (iii) investigating the problems of production relating to selected export items, (iv) examining the problems of export marketing with a view to identifying factors limiting exports, and (v) recommending measures for expanding selected export items of the State.

The Survey was conducted by a Team consisting of personnel drawn from the IIFT, with the support of a field organisation specially set up and trained in the State. However, for the purpose of providing overall guidance and direction for the Survey, a Committee of Direction, consisting of the representatives of the State Government, Ministry of Commerce, trade and industry in the State, an economist from a university in the State and the nominees of the IIFT, was constituted under the Chairmanship of the Director General, IIFT, with the Project Leader of the Survey as Member-Secretary. The Survey Team initially drew up a list of 42 items on which the Survey should concentrate, in consultation with the Heads of

Departments of the State Government, on the basis of some agreed criteria determined for deriving maximum benefit out of the Survey. On the basis of these criteria, it was decided to exclude, for purposes of intensive and detailed investigation, some of the items like tobacco and major oil-seeds, so that attention could be devoted more usefully to those items, which had till then received comparatively less attention. The items taken up for detailed survey included agricultural products, forest products, minerals, industrial items, handicrafts, handlooms and leather and leather manufactures and covered, with very few exceptions, all exporters and all leading manufacturers of the State. These items represented 57 per cent of the total exports from the State excluding tobacco, sugar, and vegetable oils and oilcakes.

The field work in the State was completed by the end of April 1967 and thereafter working papers were prepared in respect of all the 42 commodities/products taken up for detailed study, which formed the basis for further discussions with the concerned officials of the State. In the light of the discussions, to enable the Government to initiate action on the findings and recommendations of the Survey expeditiously, an Interim Report was submitted in August 1967. The Final Report, in two volumes, was transmitted in November 1967.

ANDHRA'S PRESENT EXPORTS

In the absence of classification of official statistics regarding exports by state of origin, no reliable estimates of the share of Andhra Pradesh, indeed that of any other State, in the exports of the country are available. To build up this estimate for Andhra Pradesh, a method, therefore, had to be evolved. In this Survey, the contribution of Andhra Pradesh to the total exports was computed by adding up (i) direct exports, where the origin of exports is directly traceable to the State, and (ii) indirect exports, where the finished goods of the State were sold to parties outside the State but were exported from the country ultimately. Strictly speaking, raw materials and intermediate goods of the State which go into the production of finished goods elsewhere in the country, which were exported, and raw materials/intermediate goods of other States which go into the export production of finished goods within the State, also should have been taken into account in arriving at the net contribution, but these were ignored on account of the paucity of reliable statistical data and the various complications involved. While the basis for estimation of direct exports has been a virtual census covering almost all leading manufacturers and exporters in the State, the estimates of indirect exports were made through detailed discussions with concerned exporters and export organisations outside the State.

On the above basis, the exports of Andhra Pradesh during 1965-66 were estimated at Rs 44.9 crores. This comprised mainly tobacco (Rs 17.5 crores), handloom products (Rs 5.7 crores), vegetable oils and oilcakes (Rs 5.0 crores), leather (Rs 4.5 crores), sugar (Rs 2.8 crores), mica and other mineral products (Rs 2.2 crores) and palm fibre (Rs 1.0 crore). The balance of Rs 6.2 crores was spread over a wide range of items including spices, rice bran, petroleum products, human hair, handicrafts and engineering products. The exports of tobacco, sugar, and vegetable oils and oilcakes together constituted Rs 25.3 crores. The total exports of 42 items taken up in the Survey for close study were of the order of Rs 11.2 crores.

EXPORT OUTLOOK

The Survey has brought out that the exports of these 42 commodities can be stepped up to Rs 28.9 crores by 1970-71 (post-devaluation terms), which would involve, in terms of foreign exchange earned, an increase of 64 per cent over the exports of these commodities in 1965-66. These projections have been made on the basis of a careful scrutiny of the export plans of the surveyed units and taking into account the various recommendations made in the Report. With the increase of exports of these commodities to Rs 28.9 crores, the total exports from the State would be able to reach the level of Rs 90.6 crores by the end of 1970-71. This level is not considered ambitious by any means. In fact, even the achievement of this level would not enable the State to keep its present share in the country's total exports.

MAJOR FINDINGS AND RECOMMENDATIONS

The major findings and recommendations in relation to the items taken up for intensive investigation are given below.

Agricultural Products

Chillies: The Survey estimates the exports of dry chillies from Andhra Pradesh during 1965-66 at 3,650 tonnes, entirely absorbed by Ceylon, which takes up about 95 per cent of India's exports. However, Andhra Pradesh, as the largest producer of chillies in the country, growing varieties which are likely to be acceptable to non-traditional markets, is in a position to export at least about 2,000 tonnes, valued at current prices at about Rs 80 lakhs, to countries other than Ceylon, specially to the USA and Canada. However, considering that the present export entrepreneurship within the State is weak and the risks involved in exporting to non-traditional markets are high, normal trade channels cannot be expected to

enter this field to any significant extent. The Survey, therefore, recommends that chilli exports, with special reference to non-traditional markets, should be entrusted to the Andhra Pradesh Corporation, the establishment of which is recommended elsewhere, or alternately, to a separate agency such as an Export House, which may be promoted for the purpose and work as a limb of the Corporation.

The USA imports only chillies without stalks, whereas the normal trade practice is to export chillies with stalks. It would, therefore, be necessary to keep in view the extra element of cost in fulfilling this requirement. Trials conducted by individual exporters indicate that it would be more economical to pluck the pods without stalks at the time of harvesting itself, rather than undertake this operation separately at a subsequent stage. It would, therefore, be necessary for the proposed agency to work out a suitable arrangement with the growers so as to ensure adequate supplies of chillies without stalks.

It was also found in the course of the Survey that the State grows certain varieties of chillies akin to paprika, which accounts for the bulk of demand in West European markets. It is not, however, known to what extent these local varieties will be acceptable to European consumers. There are also certain hot types such as the "Nakkapally" variety, which appear to have fair chances of acceptance in markets like the UAR. The proposed export agency could, therefore, usefully secure samples of chillies marketed in these countries and get them scrutinised by the Chillies Research Station at Lam with a view to identifying similar local varieties and assessing the scope for their commercial production in the State.

There have been some enquiries from the USA for semi-crushed chillies for distillation of oils and resinoids, though few enquiries have so far resulted in business. In view of the fact that damaged but otherwise good quality chillies are sold at a considerable discount in the principal markets of the State, the proposed export agency could also fruitfully explore the US market for crushed chillies.

It is also known that a substantial percentage of the chillies imported into countries like the USA are ultimately ground and marketed in powder form in consumer packs. The US importers are generally reluctant to import ground chillies partly because of higher US tariff and partly because of lack of confidence in the ability of exporting countries to supply chilli powder of acceptable quality. In order to increase the unit value earnings from exports and to develop local processing industries, the Directorate of Commerce and Export Promotion should explore the possibilities of

exporting processed chilli products from the State and, on the basis of assessment of demand, arrange for creation of necessary production-base in the State.

Coriander: Andhra Pradesh accounts for nearly 2/5ths of the all-India production of coriander. However, at present there are no exports from the State. The State can, however, export about 2,500 tonnes valued at about Rs 55 lakhs, without appreciably affecting the internal price level, if special efforts are made to bring about the export bias in production and marketing. The cultivation of coriander in the State is at present rather neglected and production can be increased substantially by raising the yield per acre as well as by bringing new areas under the crop. To work out measures for increasing the area without disturbing other important crops, e.g., by growing coriander on rice fallows and on lighter soils, etc., as well as to make recommendations in regard to suitable agronomic practices to increase the yield, the Directorate of Agriculture should constitute an Expert Team. A separate research wing should also be developed at the Millet Research Station at Lam as well as at another suitable place in the irrigated tract to undertake research work relating to improvement of strains, control of diseases, increasing oil content, etc. Internal marketing also needs to be reorganised so that export-worthy supplies could be more easily mopped up from the market. Adequate storage facilities should be provided at major arrival centres to carry over surplus production to lean years so as to stabilise prices. Besides, it is recommended that a certain area, preferably Guntur district, be demarcated for organising production for exports. Progressive farmers in this area should be encouraged to form themselves into a cooperative society and the entire production of the society should be canalised for exports through the proposed Export Corporation. The Corporation, on its part, should ensure adequate supply of necessary agricultural inputs, and guarantee a minimum return to the growers. It is expected that as a result of intensive cultivation, there would be a substantial rise in yield, resulting in a substantial reduction in the cost of production, which would make increased exports feasible. Depending on the success of this pilot project, its scope of operations could be extended to other areas of the State.

Cashew: The State's production of raw cashew-nuts during 1965-66 has been estimated at 14,500 tonnes, of which about 8,500 tonnes reached the 31 processing factories in the State, resulting in the production of about 1,900 tonnes of kernels. Export of kernels from the State amounted to 1.5 tonnes only. The lack of export bias in the cashew industry in the State is mainly due to the outmoded method of processing used by the existing units. The Survey has revealed that even at the existing level of raw cashew

supplies, exports of at least 2,000 tonnes of kernels and about 1,800 tonnes of cashew shell liquid oil, together fetching foreign exchange worth about Rs 2.3 crores could be mobilised from the State. As a first step in this direction, measures for the reorganisation of the existing factories into viable units have been recommended. Since finance is said to be a major bottleneck in bringing about improvements in processing techniques and in stocking raw cashew for off-season operations, it is suggested that the Government should actively assist the units to find requisite finance through its specialised agencies. In due course, the question of creating capacity in the State for "treating" the cashew shell liquid oil before export, with a view to increasing unit value earnings, should be explored by the Government.

From a long-term point of view, the cashew industry in the State can be developed on a sound footing only on the basis of adequate production of raw cashew-nuts within the State. Hence a vigorous programme of cashew development needs to be drawn up and implemented by the State Government. In order to tackle the various problems connected with the cashew development and to evolve measures for intensive cultivation of existing plantations, a senior officer, to be exclusively in charge of cashew development in the State, should be appointed by the Government. The desirability of forming a Cashew Development Board in the State, with representatives of growers, industry and other concerned agencies to advise the Cashew Development Officer in regard to extension of area, loans to growers, allocations of land, etc., should be examined by the Government. The Cashew Research Station at Bapatla needs to be strengthened. The measures recommended for increasing the return per acre, with a view to making cashew cultivation more attractive, should be implemented. In addition, it is recommended that the Forest Department should take immediate steps to revitalise areas already planted to cashew and improve collection from the plantations.

Turmeric: Andhra Pradesh accounted for about 32 per cent of all-India production of turmeric in 1965-66. Exports from the State during the year amounted to about 3,200 tonnes out of a total of 10,400 tonnes exported from the country. The Survey has shown that there are distinct possibilities of stepping up exports from the State to about 6,000 tonnes by 1970-71. In order to increase exports from the State, the Directorate of Commerce and Export Promotion should, through the Spices Export Promotion Council, collect complete information in regard to the final uses of turmeric in the various importing countries. In the light of information collected, the Directorate should sponsor market surveys in selected countries. The Directorate should simultaneously sponsor research into new

industrial and pharmaceutical uses of turmeric. With a view to maintaining and encouraging the importers' preference in several countries for Cuddapah turmeric, the State Government should take up with the Directorate of Marketing and Inspection the question of preparing a separate grade for this variety under the "Agmark" grading scheme. The Directorate should also be approached to provide pre-shipment inspection facilities at Cuddapah with a view to facilitating direct despatches to the ports from the market. In the interest of ensuring proper marketing outlets and fair return to the grower, the Government should take immediate steps to prevent artificial colouring of turmeric in the State. There is also considerable scope for improvements in curing practices as well as in storage methods, which will ultimately have the effect of facilitating export marketing.

The bulk of turmeric imported by various countries is understood to be powdered before use. In some countries, the powder is known to be adulterated during the grinding process, which adversely affects India's image. Therefore, the scope for developing export trade in turmeric powder should be studied by the State Government.

Oleoresins: Spice oils and oleoresins have a number of uses in pharmaceutical industries as well as in meat seasonsing and other food processing industries. It is understood that substantial portions of the spices imported by the USA and other Western countries are being used for this purpose. In view of the high unit value earnings from the export of oleoresins and the possibility of using cheaper spices for this purpose, the Directorate of Commerce and Export Promotion should take steps to explore markets for this product.

Tobacco Products: There are three cigarette manufacturing units in the State with a total capacity of 12,000 million cigarettes. Though one of the units exports cigarettes to the tune of Rs 10 to 15 lakhs per year, prospects for stepping up cigarette exports from the State do not appear bright on account of severe world competition and high tariff barriers. There are over 300 *bidi* manufacturing units within the State, but exports of *bidis* in the present form are possible only to neighbouring countries, where India already enjoys the position of a leading exporter. However, considerable potential exists in the State for the export of "homogenised tobacco sheets" manufactured out of tobacco waste, the availability of which is presently estimated at about 20,000 tonnes. There is also scope for setting up an export-oriented mechanised cigar manufacturing unit with a capacity of about 20,000 to 30,000 pieces per day, where a part of the "homogenised tobacco sheet" production can be used.

The tobacco scrap can also be utilised for extraction of nicotine sulphate widely used in the insecticides and pesticides industry. Even in the case of unmanufactured tobacco, the possibilities of augmenting the exports of "stripped" tobacco, which commands a substantial premium in price, need to be explored. Considering the vast scope for development of tobacco cultivation in the State, especially on lighter and saline soils, and the many possibilities of developing tobacco-based manufacturing industries, the Survey has recommended the setting up of a joint undertaking of the State Government, growers and other concerned interests to ensure coordinated and rational exploitation of the resources.

Grapes: The cultivation of grapes in the State has registered a phenomenal increase during the last 10 years, the total production during 1965-66 being estimated at about 16,000 to 17,000 tonnes. Most of the production is of Arab-e-Shahi variety. The average yield in the State is said to be the highest in the world barring Tashkent. In view of the seasonal advantage—there are few countries in the world which harvest grapes between February and April—grapes grown in the State have good export prospects. There are also possibilities of exporting wines and brandy based on grapes.

There are at present certain drawbacks such as its poor keeping quality in bunch, which preclude large-scale exports. It is learnt that these problems can be controlled through research. The cost of air freight constitutes another major impediment to exports, which needs to be solved with the assistance of the Central Government. The State Government should sponsor market surveys in selected countries and, on the basis of assessment of potential export demand, consider creating additional capacity in the State for production of wines, etc.

Rice Bran: There are 12 solvent extraction units in the State licensed to process rice bran; of these, only four are actually engaged in the extraction of rice bran oil. The exports of deoiled rice bran from the State amounted to about 30,000 tonnes.

As the rice bowl of India, the State affords considerable scope for expansion of rice bran extraction industry. It is estimated that the exports of deoiled meal could be stepped up to about one lakh tonnes valued at about Rs 2 crores by 1970-71. However, the industry is at present facing many problems and unless solutions are found for them urgently, the long-term prospects might suffer. The Survey has, therefore, recommended the constitution of an enquiry committee by the State Government to assist in finding solutions to these problems and to lay down guidelines for further location of new units so as to ensure full utilisation of rice bran produced in the State. In order to improve the export demand for deoiled meal, the

Government should expedite steps to evolve minimum standards. The Government should also consider creation of capacity in the State for refining of oil for edible purposes. There is also considerable potential for development of an export-oriented compound feeds industry.

Mesta: Andhra Pradesh is the second largest producer of mesta in the country with a total production of 4.9 lakh bales in 1965-66. There is substantial scope for increasing yield in the State. There are also possibilities of growing it in the Nagarjuna-sagar project area. Increase in mesta production in the State will directly help the country to curtail imports and step up the exports of jute manufactures. There is, therefore, an urgent need to implement the Mesta Development Scheme speedily.

Forest Products

Red Sanders: The State has near monopoly in red sanders wood supply, the exports of which, in sizable quantities, began only recently. Japan is practically the only customer at present, and exports during 1965-66 amounted to Rs 3.2 lakhs. The exports are canalised through the State Trading Corporation. In view of the fact that very little is known at present about its uses and the form in which the wood is used, a comprehensive demand survey through the STC is recommended so that the regeneration programme of the Forest Department could be properly tailored to the long-term demand prospects. Manufacture of handicrafts based on this wood for exports should also be encouraged.

Bidi Leaves: In the export of *bidi* leaves, India has near monopoly. Andhra Pradesh is one of the leading producers. However, there is need for exercising restraint in promoting the exports of *bidi* leaves in the interest of maintaining exports of *bidis* from the country. In view of the large number of intermediaries in the trade and the wide margin between the collection point price and the f.o.b. price, as well as the possibility of stepping up export earnings through monopoly exports, the Government should explore the possibility of forming an export house of all *bidi* leaf producing States in the country for the purpose of entering the export trade.

Myrobalans: The forests of Andhra Pradesh produce appreciable quantities of myrobalans, used in leather tanning industry, textile printing, dye manufacture, etc. However the collection is poor, estimated at about 2,400 tonnes, of which 200 tonnes are estimated to have been exported. The main impediment in drawing up a programme of exports of myrobalans, indeed of all minor forest products, from the State is the absence of precise information regarding total availability of supplies. To overcome this, the State Forest

Department should undertake a comprehensive survey of selected minor forest products with a view to quantifying total supplies and locating areas of concentrated production. Collection by tribals should be encouraged by offering them incentive prices by reducing margins. Marketing conditions also need to be improved so that primary collectors may receive fair price. The setting up of an extraction plant in the State to improve export earnings should be considered.

Nux Vomica: The total collection of nux vomica seeds in the State in 1965-66 has been estimated at 600 tonnes, the State's share in exports being about 50 tonnes. The Survey revealed that the Central Government's quota restrictions on exports served as a major disincentive to larger collections, especially from the forest areas, as the local manufacturing units are unable to lift all the available stocks. In view of the high unit values fetched by the alkaloids and derivatives, the State Government should consider the possibility of encouraging local processing of all available supplies. For this purpose initially a detailed demand survey in selected overseas markets should be sponsored.

Gum Karaya: There is considerable scope for stepping up the exports of gum karaya from Andhra Pradesh by improving production and methods of tapping. The State Government should, therefore, formulate standards for tapping and consider the question of granting tapping rights on long-term basis. Incentives should also be extended to contractors adopting scientific methods of tapping and collecting exportable quality gums.

Mineral Products

Steatite: Exports of steatite from the State in 1965-66 amounted to over 2,000 tonnes, valued at about Rs 4 lakhs. The main impediments in increasing exports from the State were found to be (i) uncertainty regarding the available deposits, and (ii) inability of the units to supply steatite of above 300 mesh for want of improved grinding machines. These problems need to be looked into by the State Government. The State Directorate of Commerce and Export Promotion should also disseminate information regarding the specifications in demand in different markets abroad. The Andhra Pradesh Mining Corporation should consider the feasibility of setting up a custom-mill for talc processing in Anantapur district.

Processed Mica: Mica industry is among the major foreign exchange earners of the State, exports in 1964 having amounted to about Rs 1.4 crores. The industry suffers from many handicaps, especially in regard to methods of mining and location of mica seams. These problems need to be studied by an expert committee and

relief provided wherever possible. The customs authorities should be approached to grant full rebate for air freight from C & F value in calculating the FAS value for purpose of levy of export duty. The State Government should also consider reducing the purchase tax of 3 per cent to bring it on par with Bihar. Simultaneously with the implementation of the proposal for the manufacture of insulation bricks at Gudur, the export potential for mica bricks should be explored. Attempts should be made, if necessary by getting an expert on mica attached to the Indian Embassies in important consuming countries, to collect information regarding the end-uses of mica products in the importing countries so as to bridge a major gap in our knowledge of export markets. Developing certain link roads in the mining belt to facilitate full exploitation of mining potential is recommended.

Slate: Nearly 85 per cent of the known deposits of slate in the country are located in Andhra Pradesh. The exports are, however, meagre—about Rs 37,000 in 1965-66—owing, among other causes, to shortage of wooden frames. The Government should, therefore, try to find substitute wood in Andhra's forests to help the industry to overcome this problem. Methods of quarrying also need to be improved to permit deep mining. The State Government can also be of considerable assistance in ensuring the use of modern machinery for polishing, etc. The State Government could further help the industry by locating prospective markets abroad and feeding back to industry details of processing techniques adopted by other leading competitors. If necessary, the services of a technical expert could be secured to modernise the industry.

Ferro-Silicon: The unit licensed to produce ferro-silicon in Andhra Pradesh was found to have switched over to the production of other ferro-alloys despite the fact that the country continues to be deficient in the supply of ferro-silicon. The State Government should investigate into the causes which led the unit to give up the production of ferro-silicon and, if necessary, license new capacity for the exploitation of the mineral.

Polished Granite: The polished granite industry, earning Rs 23 lakhs in 1966-67, is entirely export-oriented. The State has an abundance of natural deposits of granite, but processing is done only against specific orders. The non-availability of proper machinery to reduce the thickness of the slabs is understood to impede expansion of exports through reduction in freight. The State Government should assist the units in the procurement of such machinery and in undertaking necessary measures to improve our competitive position in the traditional as well as new markets.

Industrial Products

Cast Iron Foundry Products: There are at present about 286 foundries in Andhra Pradesh, mainly concentrated in Vijayawada. Their total production has been estimated at 14,000 tonnes. There are, however, no direct exports of foundry products from the State.

Lack of necessary export climate was found during the Survey to be the major hindrance to lack of export effort among the units, despite the existence of large unutilised capacity and the known export opportunities. To enable the manufacturers in the State to acquaint themselves with organising production for export, it has been recommended that the State should sponsor a group of enthusiastic and forward-looking foundrymen on a study tour of the leading units in Calcutta. The units should be encouraged to become members of the Engineering Export Promotion Council so as to be eligible to avail of the benefits of promotional work undertaken by the Council. Testing facilities should be provided for the foundries in Vijayawada to improve quality of production. The use of improved hot-blast type of cupolas should be encouraged. Training scheme for moulders should be tailored to the immediate needs of the industry.

Aluminiumware: Production of aluminiumware in the State is confined to the small-scale sector and is mainly concentrated in Rajahmundry. The present production is estimated at about 4,000 tonnes. The unutilised capacity during the Survey averaged about 50 per cent. There have been no exports from the State.

The Survey indicated that six units in the State possessed the requisite technical competence, resources and interest in exports. As a first step in organising them to undertake exports, they should be encouraged to gear up production to conform to ISI standards, by supplying them aluminium ingots of at least 99.5 per cent purity, with replenishments under the "Green Form System" as and when export orders are received. The export assistance scheme also needs to be revised so as to enhance the replenishment rate on the exports of aluminium utensils. To assist the manufacturers in keeping pace with the modern methods and designs, the State should secure and disseminate the designs developed by the UN expert engaged by the Government of India recently for the purpose.

G. I. Baskets: Current production of galvanised iron baskets in Andhra Pradesh has been estimated at 1,400 tonnes. The industry is entirely in the small-scale sector. There have been no exports from the State except for a trial consignment of 50 dozens to Ghana. The prospects do not appear bright either on account of the present state of the industry and the raw materials shortage. The State Government would have to, therefore, undertake, in the first

instance, steps to gear up industry to improve quality by securing for them the technical details of improved galvanising process evolved by countries like Poland and Yugoslavia and securing for them sheet cuttings from TISCO and IISCO. The units should be encouraged to gain proficiency in the production of buckets out of B.P. sheets and galvanise them, because such buckets enjoy better consumer preference abroad.

Scientific, Survey and Drawing Instruments: A wide range of scientific, survey and drawing instruments, having export potential, are manufactured in the two units located in the State. The total value of their production in 1965-66 was estimated at Rs 61 lakhs and of total exports at Rs 28,270. The Survey, however, indicated that these units and the new units proposed to be established would be able to export instruments of the value of about Rs 22 lakhs by 1970-71.

A major handicap in promoting the exports of these instruments was found to be the difficulty in securing the required raw materials at reasonable prices. The Directorate of Commerce and Export Promotion should, therefore, assist the units in securing necessary import licences. The prices of raw materials released from the Raw Materials Servicing Centres should also be reduced by curtailing overheads, at least in the case of releases for exportable products. Assistance should be secured from the Central Scientific Instruments Organisation in effecting cost reduction and in introducing rigid quality control measures, with the necessary testing equipment provided on hire-purchase. The scope for developing specialisation in production on all-India basis needs to be explored. The desirability of forming a consortium for purposes of undertaking exports should be studied. The Indian Institute of Packaging should be approached to evolve functionally adequate and economical packages suited to various types of instruments.

Cycle Parts and Accessories: Though there are about 40 units in the State engaged in the production of cycle parts and accessories, all of them are in the small-scale sector and the utilisation of capacity in all cases is very low—in some cases amounting to less than 10 per cent. There were no direct exports from the State and indirect exports during 1965-66 amounted to an estimated Rs 2 lakhs.

According to Survey findings, immediate scope for exports from the State exists only in the case of cycle chains, dynamo lights and gear cases. In all these cases, however, improvement in the supply of raw materials is a basic precondition for increasing exports. The units manufacturing these items have not secured ISI certification, as they do not have necessary testing equipment. The Directorate of Industries of the State Government should assist

the units in securing the necessary equipment indigenously on hire-purchase. Where necessary, units should also be provided with technical know-how to improve the quality of production.

Builders' Hardware: Out of 60 and odd units manufacturing builders' hardware items in the State, only 5 are considered to be capable of producing goods of exportable standards. Only one unit has, however, actually undertaken exports, amounting to about Rs 1 lakh in 1963-64. The Survey indicates that the exports of these items can be stepped up to Rs 5 lakhs by 1970-71. However, before exports can pick up, further improvement in quality, which the units themselves are capable of undertaking, is called for.

In view of the fact that inadequate knowledge of market opportunities and absence of market contacts are mainly responsible for meagre exports from the State, assistance should be provided by the State Directorate of Commerce and Export Promotion in these directions, especially in procuring samples of items in demand abroad.

Oil Engines and Pumps: Though over 40 units are registered for the manufacture of oil engines and pumps in the State, the Survey has shown that the units actually engaged in production are only 15 in number. None of the producing units has undertaken any exports so far despite large unutilised capacity of more than 50 per cent in a majority of cases.

In most cases, quality of production is found to be low compared to required export standards mainly due to lack of proper testing facilities. In the case of petrol/kerosene engines, their heavy weight compared to Japanese models has proved to be another handicap. In view of the fact that these types of engines have prospects of fairly large demand abroad, it is suggested that the State Government should help the unit to secure the services of an expert to redesign the engines. The export-worthy units should also be helped to procure necessary testing equipment. There has been a move on the part of a manufacturer of petrol/kerosene engines to manufacture diesel engines. The Directorate of Commerce and Export Promotion should ensure that an export bias is introduced to this manufacturing programme right from the beginning.

Steel Furniture and Hospital Equipment: There is one large-scale unit and about 60 small-scale units manufacturing steel furniture and hospital equipment. The major concentration of the industry is in Hyderabad. Barring exports by one of the firms to its associates in Nigeria, exports from the State have been negligible.

The Survey indicates that only four firms in the State have the capacity to enter the export market, but even in their case the limi-

tations appear to be many. As a measure of assistance, the Andhra Pradesh Small Scale Industries Development Corporation should make available to them suitable raw materials at competitive prices. The State Government should also strive to make available to these units necessary expertise and equipment to improve the quality of production for the export market. The units may also be advised to specialise in folding type furniture, which has better export demand. There is also need to bring about standardisation in design and manufacture. The Directorate of Commerce and Export Promotion should feed the units with information about the latest trends in design in the world markets and should assist them in bringing out attractive sales literature.

Industrial Laminates: There is only one unit manufacturing industrial laminates in Andhra Pradesh. It manufactures paper-based and fabric-based industrial laminates in addition to decorative laminates. The production of industrial laminates in 1966-67 amounted to 834 tonnes of which about Rs 61,000 worth of goods were exported to Holland and Sweden.

The main problem in stepping up the exports of industrial laminates was found to be the irregular and inadequate supply of certain imported raw materials, which go into its manufacture. The State Government should take up this matter with the Directorate General of Technical Development. The Ministry of Commerce should also be approached to grant drawback of duties on exports. Ocean freight, which is unduly discriminatory, also needs to be brought down with the help of the Freight Investigation Bureau. The unit should also be persuaded, if necessary by seeking foreign collaboration, to produce components made out of industrial grade laminates.

Detonators: The only large-scale detonator manufacturing unit in the country is situated in Hyderabad. The unit manufactures ordinary and instantaneous electric detonators and detonating fuses. The unit is prospecting for export markets and expects to realise about Rs 25 lakhs in foreign exchange per year.

The unit needs some assistance for obtaining its raw material requirements from the cheapest sources. In addition, speedy allotment of wagons for transport and development of facilities to handle explosives cargo at Kakinada or Visakhapatnam port will lead to reduction in costs and thus improve its competitive position. Assistance from the Government will also be necessary to bring down the prohibitive ocean freight rates. Market surveys in selected regions may be sponsored to locate potentially promising markets.

Handicrafts

A survey of selected handicrafts of the State indicates that though many of them can find export markets in sizable quantities, their production base is generally weak and needs to be geared up substantially, if the export effort is to be meaningful. The development of the production base involves *inter alia* supply of right type of raw materials, development of adequate skills and efficiency, gainful employment of trained artisans in the craft, research in designs, provision of necessary marketing outlets and financing of the craft. Since there are many advantages in integrating these functions in a single agency, the formation of a Corporation for the purpose by the State Government is recommended.

Crochet Lace: Crochet lace making is widely practised in Narsapur, Palakol and Tanuku talukas. An estimated one lakh female workers are engaged in it, mostly on part-time basis. The industry is largely export-oriented, exports accounting for about Rs 20 lakhs. Exports can easily be stepped up to Rs 35 lakhs, if (i) supply of uniform quality threads at reasonable prices is ensured; (ii) *inter-se* competition among exporters is avoided; (iii) credit facilities are improved; (iv) better packaging is arranged; and (v) export publicity is undertaken.

Pile Carpets: The pile carpet industry in Andhra Pradesh is concentrated at two centres, Eluru and Warangal. Total exports in 1965-66 amounted to Rs 7 lakhs, originating almost entirely from Eluru. However, only about 50 per cent of the carpet looms in the State are put to productive use, mainly owing to problems of organisation and production. Exports can, therefore, be easily stepped up to about Rs 15 lakhs.

As a precondition, however, there is need to bring about considerable improvement in pre-weaving processes. The Government should consider the possibility of bringing raw wool under compulsory grading before sale. Wool carding facilities should be made available to help the weavers at both Eluru and Warangal. An up-to-date wool processing and spinning plant should be established at Warangal to improve the quality of carpets. Where necessary, training of weavers by master-weavers from outside the State should be arranged. A carpet museum should be established at Eluru.

Kondapalli Toys: The wooden toys of Kondapalli are specialties of a tribe living in Kondapalli village near Vijayawada. The present production, contributed by about 18 families, is estimated at around Rs 50,000, of which about Rs 20,000 worth of toys are estimated to be exported. The main problem faced by the craft at present is the supply of "puniki" wood which comes from a forest

near the village. The State Forest Department should take steps to preserve the forest carefully and ensure adequate supply of wood to the craftsmen at reasonable prices. The State Government should also help the craftsmen by (i) evolving suitable packages, especially for export orders, and (ii) discovering extinct designs and popularising them among the artisans.

Bidriware: The bidriware industry, concentrated in Hyderabad in the State, contributed over Rs 40,000 to exports during 1965-66. Dearth of certain raw materials such as zinc and copper sometimes tends to hamper the production of bidriware items, despite the fact that the overall requirements of the industry are small. There is also scope for research in (i) product innovation, (ii) design improvement, (iii) reduction in the weight of the alloy, and (iv) scientific testing of the alloy. Quality control should be made compulsory and possibilities of broad-basing the crafts by training artisans outside the existing circle should be explored.

Kalamkari: Kalamkari printing is a typical example of the indigo-process and was formerly used mainly for temple decorations. It is a typical craft of the State and is practised mainly at Machlipatnam and Kalahasti. The value of annual production is about Rs 1 lakh and of exports about Rs 20,000. In order to promote its exports, a carefully designed campaign requires to be launched. At the same time, designs, now extinct, should be revived and the present training programme should be broad-based.

Nirmal Artware: The Nirmal industry is concentrated mainly in Hyderabad. Though production is around Rs 5 lakhs, current exports are estimated only at around Rs 23,000. The exports, it is felt, could be stepped up to about Rs 3 lakhs by increasing production. The main impediment, however, appears to be lack of drive and a proper channel for export marketing. The Government should be able to render necessary assistance in both the cases.

Himroo: The current annual production of Himroo fabrics in Andhra Pradesh has been estimated at about Rs 2 lakhs. There are five units engaged in its production. Bulk of the production has been in the form of shawls, but one unit produces fabrics in running length also. There have been no direct exports from the State.

In order to appeal to foreign markets, the industry should also produce dress material, tapestry material, etc. A market survey should be sponsored to ascertain consumer tastes in prospective markets. The possibilities of producing shawls out of woollen yarn should be explored.

Studded Bangles: There have been only trial exports of studded bangles from Hyderabad. Further refinement of the process appears to be necessary to introduce them in sophisticated markets. To carry out necessary product improvement and explore foreign markets, the manufacturers should be organised into a cooperative society.

Handloom Products

Andhra Pradesh has about 6 lakh handlooms, of which about 3.2 lakh looms are covered by cooperatives, while the rest are under master-weavers.

The Survey revealed that the exports of handloom fabrics were mostly in the hands of exporters from outside AP and no worthwhile effort had emanated from within to undertake export marketing. Dependence on outside agencies and erratic nature of export demand from such sources had precluded development of a proper production base to cater to the export markets. If the export potential of handloom items is to be effectively tapped, it will, therefore, be necessary for the State Government to create an autonomous organisation such as Handloom Export Corporation for the purpose. The Corporation would be given exclusive rights to market specific types of handloom products to certain markets so that it could undertake long-term investments in the building of a suitable supply base, especially in the proposed textile township at Ramagundam in Karimnagar district.

Finance was found to be another major bottleneck in undertaking production for export markets. The handloom units were generally unable to get adequate supply of credit from the normal banking channels or other specialised institutions, resulting in substantial idle capacity. The State Government should, therefore, consider the setting up of a finance corporation to ensure adequate flow of credit to the handloom units, especially in the sector outside the cooperative fold. The State Government's assistance will also be required to arrange for distribution of certain types of imported dyes, which are in short supply, and in setting up a plant for processing and printing the fabrics produced.

Madras Handkerchiefs: An estimated 20,000 looms are engaged in the production of Madras handkerchiefs, of which Andhra Pradesh is the leading producer. The total value of production is estimated at over Rs 2 crores. Recently, their exports have declined sharply on account of competition from Japan.

Since Japan's competition is based on imitation of Indian designs in spun rayon, it would be necessary to improve on Indian

designs continuously, making it difficult to catch up with India. In view of the large business involved, a design development department exclusively to cater to the needs of weavers of "Real Madras Handkerchiefs" should be opened at the Weavers' Servicing Centre at Mangalagiri.

Bed Spreads: The production of bed spreads in Andhra Pradesh is mainly concentrated in Kurnool and Krishna districts. Yemmiganur in Kurnool district is the main centre of production. In all, about 8,000 looms are understood to be employed in their manufacture. At present, exports are sent, mostly indirectly, to countries like Singapore and Nigeria. Development of a direct export channel will help in improving exports by enabling the weavers to get a "feel" of the export market and enabling them to produce in accordance with consumer-preferences.

Lungis: The value of production of lungis in the State has been estimated at Rs 50 lakhs, the number of looms engaged being about 3,000.

Though the lungis have acquired considerable reputation in the South-East Asian markets, exports to countries like Indonesia have declined on account of the protectionist ban imposed by those countries. The Government of India should be approached to seek modification of the ban from such countries in favour of protective duties. The possibilities of creating a market in Arab countries should also be explored.

Silk Fabrics: There are over 9,700 handlooms engaged in silk production in the State, with a total annual production of around 1.75 million square metres. The main production centre is Dharmavaram in Anantapur district.

The industry in the State is facing considerable difficulties in the procurement of silk yarn. The weavers also face difficulties in getting the raw silk dyed properly. The Government should, therefore, devise a scheme, in consultation with the Central Silk Board, for procuring silk yarn from outside the State at reasonable prices and supplying it to the weavers at uniform rates. A silk dying plant should also be set up at Dharmavaram. Efficient units should be encouraged to diversify production by undertaking weaving of dress fabrics, etc., which are in demand abroad. Experiments should be conducted in weaving longer piecelengths of up to 60 yards for export purposes.

Coir-Matting: Though Andhra Pradesh ranks fourth among the coconut producing States in India, the utilisation of coir is low. The present production of coir-matting is negligible. The State has vast potentialities for development of a coir-matting industry.

The Government should, therefore, in addition to upgrading the pilot factory set up at Narsapur, get feasibility reports prepared for another 4-5 factories and make them available to interested entrepreneurs. To ensure adequate supply of right type of coir, the growers should be advised about plucking the coconuts on the 40th day instead of allowing them to dry on tree tops.

Leather and Leather Manufactures

Andhra Pradesh occupies a position of considerable importance in the G.I. tanning sector of the leather industry in India, which accounts for more than 90 per cent of leather exports from India. Direct exports from the State, however, amounted only to about Rs 6 lakhs in 1965-66. Indirect exports were estimated at Rs 4.4 crores. On the basis of the Survey, it is felt that exports could be stepped up to the level of Rs 9 crores by 1970-71.

There is, however, need to provide adequate credit facilities to selected units to enable them to acquire certain types of machinery and equipment considered necessary to improve quality and efficiency of production. The Government should also take steps to encourage production of chrome tanned leather, which will help give a fillip to the footwear industry in the State.

Production of leather goods in the State is mainly confined to footwear. Even here, production in private units is confined to chappals. It is possible, however, to mobilise exports of the order of about Rs 10 lakhs by 1970-71, if adequate efforts are made to strengthen the production base.

ORGANISATION FOR EXPORT PROMOTION

A major weakness in the economy of Andhra Pradesh, noticed during the Survey, is the inadequate availability of entrepreneurship for trade and commerce. The approach to commerce in the State is generally inward-looking, not only in the case of industrial products, which can be understood, considering the level of industrial development, but also in the marketing of agricultural products. Despite the fact that the economy of the State is heavily dependent on the agricultural sector, trading entrepreneurship in the case of a majority of agricultural products like chillies and turmeric—the only major exception being tobacco—within the State is limited to playing the role of commission agents, brokers and the like, and the principal market functionaries are traditionally located in the adjoining States or in the port towns.

The Survey also revealed that there had been, in general, absence of a proper climate for export in the State. A majority of entre-

preneurs in the manufacturing as well as trading sectors exhibited a lack of knowledge of the need to export, the opportunities available for export and the assistance provided by the Central and State Governments for undertaking exports. Quite often, exports were considered only as an outlet for disposal of surplus products, which the manufacturers could not sell within the State.

Promotional Measures

These findings lead to the conclusion that for organising an effective export promotion drive in the State it would be necessary to (a) generate consciousness in the trade and industry of the State for participating in the export effort and to create an appropriate climate for exports; (b) initiate active steps for promoting the growth of export entrepreneurship; (c) undertake a positive programme for assisting the establishment of and encouraging the industrial units for export production; and (d) create facilities which would foster export production and induce the manufacturers and exporters to undertake exports.

It is obvious that unless a comprehensive effort on these lines is initiated and intensified, the export promotion drive in the State would not be able to gather momentum. The initial effort of generating the export climate and providing the facilities and assistance to the manufacturers and exporters will have to be undertaken by the State Government. Simultaneously the State Government may also have to take direct interest in the production and export of these items which have potential for export and for which the export entrepreneurship is not at present forthcoming.

Organisational Set-up

For these various purposes, an effective organisational set-up will have to be created at the level of the State Government for implementing the programmes which would achieve the above objectives. The organisational effort is required to be concentrated in the following broad areas:

- (i) Strengthening the policy formulation and advisory functioning of the State Export Promotion Board;
- (ii) strengthening of the State Directorate of Commerce and Export Promotion, with consequential strengthening of the State Commerce Department;
- (iii) initiation of certain specific policies at the level of the State Government, which would stimulate a positive climate in favour of export production and expansion of export entrepreneurship; and

- (iv) establishment of an Export Corporation at the State level.

State Export Promotion Board

The present State Export Promotion Board, functioning under the Chairmanship of the Minister of Commerce, has been constituted on the lines of the Board of Trade. With greater export consciousness generating in the trade and the industry as well as in the concerned departments of the State Government, it may become necessary for the Board to meet more often, particularly in the initial stages, with specific promotional programmes and suggestions being laid before them for consideration.

Directorate of Commerce and Export Promotion

It is envisaged that the Directorate of Commerce and Export Promotion of the State Government will have to deal with the following principal functions:

- (a) To stimulate export consciousness in the industry and trade of the State;
- (b) to identify the individual commodities of export potential, assess their potential and to fix overall and commodity-wise targets of exports on short-term and long-term basis;
- (c) to review periodically the progress in relation to the targets fixed and to investigate into the causes of short-falls, if any;
- (d) to organise the collection and dissemination of information of export market opportunities to the industry and trade and to provide consultancy service and assistance to the units, organisations and agencies dealing with the respective commodities and products;
- (e) to take up with the Government of India, through the State Department of Commerce, matters for removing the bottlenecks and difficulties in order to provide positive assistance to the manufacturers and exporters of the State;
- (f) to examine, from time to time, the specific concessions and assistance which would need to be granted by the State Government in respect of taxes, cesses and local levies in the interest of export promotion; and
- (g) to maintain contact with the respective Export Promotion Councils, Commodity Boards and other concerned organisations.

For effectively discharging these various functions, the Directorate would obviously need to be adequately strengthened at the respective levels with personnel possessing competence and specialisation in different areas of export promotion.

State Export Corporation

In addition to strengthening of the Directorate of Commerce and Export Promotion, it is suggested that the State Government should actively consider the desirability of setting up the Andhra Pradesh Export Corporation (APEX) as a direct measure to meet the existing lacuna in relation to export entrepreneurship in the State. In this context, mention needs to be made of the fact that although the Andhra Pradesh Small Scale Industries Development Corporation and the Andhra Pradesh Mining Corporation are both registered as export houses, they have not been able to achieve any measure of success in the export front due to other tasks entrusted to them. It is, therefore, absolutely essential that an Export Corporation, as suggested above, be set up for promoting exports of products and commodities of Andhra Pradesh origin exclusively. The primary objective of the Export Corporation of Andhra Pradesh would be to pick up selected commodities and provide them developmental assistance, where necessary, and to organise the facilities required for their export including provision of financial assistance against exports and correspondence on behalf of small manufacturers and exporters.

In view of the heavy orientation of Andhra's economy towards agriculture and the relatively bright prospects for exports of agricultural and agro-based commodities and products, it is considered that the proposed Export Corporation should primarily function as a channel for the export of agricultural and agro-based products of the State, which on their own cannot be or are not being exported. For the export of manufactures and semi-manufactures of medium and small-scale industries of the State, which on their own would not be able to undertake the task of organising the export effort, it is recommended that a separate export corporation be set up in the State. If it is not possible for the State Government to set up another export corporation, they may consider availing of the assistance of the State Trading Corporation, the Handicrafts and Handlooms Exports Corporation, etc. The bifurcation of export effort on the basis of commodity groupings, as suggested above, will also ensure that duplication, at the State level, of the effort which is being organised on all-India basis by the State Trading Corporation and other similar organisations, would be avoided. Further, a limited range of commodities would enable the export corporations to concentrate more effectively on their exports.

It is envisaged that the proposed Export Corporation should also, in consultation with the Andhra Pradesh Small Scale Industrial Development Corporation and other concerned organisations, ensure easier supply of the raw materials and components to the export manufacturing industries and units. It is suggested that before setting up the Corporation, the State Government should collect information about, and gain experience from the functioning of the State Export Corporations, which have already been set up in Punjab, Uttar Pradesh and Gujarat.

State Government Policies

While the organisational effort is developed by the State Government on the lines indicated, it is also suggested that specific additional measures would need to be initiated for supplementing and strengthening the effort by the Directorate of Commerce and Export Promotion and the Andhra Pradesh Export Corporation.

Firstly, the State Government can stimulate greater interest of the leading export houses in the country in regard to the commodities and products of Andhra Pradesh State and invite them to set up their branches in the State. For this purpose, specific measures of inducement might have to be determined by the State Government.

Secondly, more effective liaison could advantageously be established with the State Trading Corporation and the Minerals and Metals Trading Corporation with a view to fuller exploitation by these organisations of the commodities and products, which can be picked up from the State for the purpose of export.

Thirdly, the functioning of the Raw Materials Service Centres of the APSSIDC needs to be examined from the point of view of ensuring greater and easier availability of the specific raw materials and components which are required for export production, and the provision of priority allocation to manufacturing units on the basis of the export orders secured by them either directly or through any other export organisation. For this purpose, it would be necessary for the APSSIDC to make an assessment of the requirements of specific raw materials and components required for the purpose of export production and approach the Union Ministry of Commerce, through the Directorate of Commerce and Export Promotion, for the release of specific licences for the stockpiling of such raw materials and components for immediate release to the manufacturing units on receipt of their indents for export production at prices comparable to international prices.

Fourthly, the State Government may also consider making a study of the power supply rates fixed by the State Electricity Board

with a view to examining the possibilities of providing power at concessional rates for those export industries which are heavy consumers of power. This would enable such industries to reduce the cost of production to some extent.

In the interest of stimulating greater export production, it would also be desirable that the State Government should ensure more extensive utilisation of the facilities available from the National Small Industries Corporation for the supply of machinery and equipment on hire-purchase basis to those units, which undertake a programme of production for export.

FOLLOW-UP SURVEY

As already explained, the present Survey is confined to the intensive study of the export potential of 42 groups of products and commodities. In respect of a large number of other items, only a limited study was undertaken with the object of estimating their contributions to the exports from the State. It is, however, felt that a more detailed examination of such "unsurveyed" items will help to bring out a clearer idea of the export potential of the State and the problems involved in mobilising these products for export purposes. It is also felt that efforts should initially be concentrated on items, adequate information regarding which is not available at present to draw up a comprehensive plan for exports.

BOOK REVIEWS

THE WEALTH OF NATIONS: AN ANALYSIS WITH SPECIAL REFERENCE TO UNDERDEVELOPED COUNTRIES

BY ASOKE KUMAR CHAUDHURI

The World Press Private Ltd., 37-College Street, Calcutta-12;
1967; Pp. XVI+165; Rs 20.00.

This book contains an analysis of the theory of economic development in the *Wealth of Nations* and its relevance to the special growth problems of developing countries. The author gives a detailed analysis of the theory of economic growth implicit in Adam Smith's *Wealth of Nations* and goes on to discuss the various aspects of the theory such as division of labour, concepts of productive and unproductive labour, theory of value, theory of distribution, laissez-faire doctrine and theory of international trade.

Of the two parts in the book, the first part is relevant to the basic subject of the book but the second part does not bear any relevance to the main theme proposed to be examined by the author. Chapter I gives an analysis of Adam Smith's growth model. Chapters II and III deal with the theory of division of labour and the concepts of productive and unproductive labour. In Chapter IV, Adam Smith's theory of value is detailed out. Chapters V and VI summarise Adam Smith's renowned theory of laissez-faire and the functions of the government. According to the author, "it will be incorrect to maintain that Smith's main objective is to demonstrate how free competition will bring about an optimum allocation of given resources among different lines of employment in accordance with the existing consumers' demand . . . The allocative problem occupies a subordinate place in Smith's analysis". Adam Smith's main object is to focus attention on the long-term determinants of the rate of growth of social output. The author rightly cautions that "Smith's argument in its entirety is not acceptable to us . . . But the basic theme, viz. capital accumulation being the determinant of the size of the national dividend, is of crucial relevance to an underdeveloped economy endeavouring to break away from a state of underdevelopment equilibrium. The problems facing an underdeveloped economy require a different solution". As automatic forces like population increase and demonstration effect divert a large chunk of additional income into current consumption, much reliance cannot be placed on voluntary saving in an underdeveloped country.

The setting for Adam Smith's theory obviously is the primitive pre-industrial era. The basic core of his theory centres on the mechanism of the invisible hand of the market, motivated by individuals' profit. In such an economy, capital accumulation takes place from voluntary saving by individuals.

According to Adam Smith, capital formation is a basic determinant of the size of the national dividend and voluntary saving provides the necessary capital formation for economic development. In this context, it is necessary to keep in mind that the content and the context of competition of the pre-industrial era and the present day world are no longer the same. Similarly, the basic approach of the developing countries to economic development and the context under which they have to develop are fundamentally different from the problems faced by a country in the pre-industrial era in the course of its development. It may not be incorrect to say that since Adam Smith's theories are 'dated', the relevance of such theories to the complex situations of developing countries is limited. This conclusion gets strengthened when we think in terms of the numerous techniques of production and the institutional set-up capable of giving a conscious direction and choice of these techniques available in a developing country which were inconceivable in a pre-industrial era.

—S.K. Verghese

READINGS IN MARKETING MANAGEMENT

EDITED BY HARPER W. BOYD & MOOL CHAND KAPOOR

Asia Publishing House, Calicut Street, Ballard Estate, Bombay-1;
1967; Pp. XIV+640; Rs 45.00.

Since the early 'fifties of the present century marketing management has been passing through a revolution, both in terms of the rapidity and the all-pervasive character of the changes that are taking place in various spheres of management and marketing, in the application of techniques and in the impact of these techniques all around. A number of developments in this context have resulted in the opening of many new fronts of approach to the marketing and management phenomena. Ever-increasing emphasis on marketing orientation in management is primarily an appreciation of the fact that in business, between the green and the red there is no amber and that without adequate preparation with respect to both the techniques developed and their application, an organisation is likely to be caught unawares.

The rapid changes in the concepts of the product and the market have brought to the fore the prime need for adequate grasp of meeting the two, on the basis of inter-disciplinary understanding. Both these concepts are dynamic and play a key role in the productive and distributive spheres, in the goal-satisfaction of the customer in conditions of keen competition from other suppliers and substi-

tutes. The changing moods of the individual markets and, within each market, of the customers belonging to different strata and the underlying need for prediction of the general pattern of changes to cope with the inherent uncertainties in the process, have spelt several responsibilities for management. Absorption of these developments in the field of marketing has hardly been as manifest in India as desirable. This is partly because the Indian economy is still insulated from competition in view of the keen internal demand and the relatively small number of suppliers in the same line of goods. This is, however, a condition not likely to last long. Already a spell of difficulties was experienced by the introvert management in the context of recession. The challenge would be much more pointed and demanding when the present market insulation gives rise to keen competition both within and outside the country.

It is in this context that this massive volume should be welcome as the first Indian publication on the subject. On the credit side, one may mention the wide canvas of learned papers, covering various aspects of marketing management, provided in the book. The growing complications in the field of marketing management and the various ways to face these complicated situations have been presented well. One of the authors, Professor Harper W. Boyd of Stanford University, USA, has been intimately connected with the development of core of knowledge in marketing and several of his scholarly works are already widely used in teaching marketing management in different parts of the world. Dr. M.C. Kapoor, on the other hand, has a wide acquaintance with the nature of the problems faced by Indian management today and the way these problems have to be approached for adequate solution. Moreover, his doctoral thesis on the State Trading Corporation of India has won him reputation as an authority in the field of marketing management. The selection of the articles and papers presented bears the imprint of their intimate knowledge of the subject and the problems encountered in practice so that the volume presents a useful spectrum of concepts and their practical application in Indian conditions.

The arrangement of the topics is scientific and methodical. The volume thus presents four papers under the Nature and Scope of Marketing Management, five papers under Effect of the Market on the Activities of the Firm, six papers under Segmenting the Market, five papers under Planning and Decision-making in Marketing, twentythree papers under Major Marketing Strategies, five papers under Marketing Organisation and five papers under Evolution of Marketing Efforts. In all, there are fiftythree learned papers written by authors already well-known in their individual areas of specialisation.

Though written by different authors and published in different journals over a period of fifteen years or so, the arrangement of the papers has made the volume compact and organic. As a work of handy reference for students and teachers of marketing management and for practising marketing managers, the volume would be indispensable. Compared with similar volumes published abroad, the price should be taken as relatively cheap and accessible.

On the debit side, perhaps one should mention that for those already acquainted with the original sources in which these papers were first published, the volume does not have much new to say. In addition, some of the pieces included in this volume have found place in so many other volumes that they tend to make the present volume almost indistinct. Moreover, as one goes through the volume, one misses some of the very important papers and articles published in *Harvard Business Review*, *Journal of Marketing*, *Business Horizons*, *California Management Review*, *Journal of Business* and so on. However, as it is, the volume has enough to offer to the serious-minded teachers, students and practitioners in marketing management.

—P. Chattopadhyay

INCENTIVES IN PUBLIC ENTERPRISE

BY INSTITUTE OF PUBLIC ENTERPRISE

N. N. Tripathi Pvt. Ltd., Princess Street, Bombay-2; 1967;

Pp. X+252; Rs 15.00.

Provision for incentives has become extremely important for raising the productivity of Indian industries. It has been realised that the Indian labourer responds to the various incentive schemes like his counterpart in other parts of the world. In the face of the misleading notion that in India economic incentives do not operate significantly in getting response from the labourers, devising the right type of incentive schemes to get right responses is the most difficult task confronting all business managers—the more so in the case of public enterprises. The role of public enterprise has been differently understood in our country. It is believed that public enterprise need not follow the trends relevant to private industries. It is argued that public enterprise can very well operate on the basis of the fact that it is owned by the State rather than individuals or a group of individuals. It is in a position to provide incentives to the labourers on the basis of certain moral and ethical principles. Fortunately, this over-emphasis on the role of the ownership aspect for labour is getting diluted because of the experience of working public enterprises, which is becoming richer and richer. In addition, it is also believed in India that according to the economic function of public enterprise, there is no need for an enterprise pricing the products on the basis of cost of production. According to the objective of the public enterprise, it is expected to work on a no-profit no-loss basis.

In a planned economy, where a part of the saving has to flow from the public enterprise, it is essential to keep in mind the fact that these public enterprise units also do contribute to the saving potential of the country. Perhaps their role is more significant in driving home the desire to increase the saving and thereby enhance the saving potential of the country. In order to attain this objective it has become necessary for the public enterprises to work on profit

and lower the cost of production. This lowering of the cost of production can be achieved in various ways. One of these is to raise the productivity and increase the involvement of labour in the work of the enterprise. In this state of operation, the incentives and the choice of the incentives play a very significant role.

In this context, the compilation of seminar discussions and papers by the Institute of Public Enterprise is of immense importance. The book is the outcome of three seminars convened by the Institute of Public Enterprise at Delhi, Ranchi and Hyderabad. An attempt has been made in this book to present in a summary fashion the main lines of thinking put forward by eminent people in the field. In addition, some of the incentive schemes that are operating in select enterprises have also been discussed in order to provide adequate information regarding the types of incentive schemes that are in vogue in the public enterprise. This also includes a number of papers by engineers, personnel managers and the like who have given thought to the role of incentives.

While the book has done a great service in contributing to the understanding of role of incentives, one feels that it would have been desirable that the summary of proceedings had been given in some more detail. The review of the Delhi seminar has been more cogently presented than that of the Ranchi seminar.

The reader finds it difficult to get a comprehensive picture of the thinking prevailing at the seminars on the various issues pertaining to incentive schemes of public enterprise. Nevertheless, the book, being one of the first on the problem of incentives of public enterprise, has opened up a new area of thinking where more concerted effort is to be made to get adequate response from the labour.

—*Sumitra Chishui*

THE PATTERN OF INVESTMENT AND ECONOMIC DEVELOPMENT

BY HANNAN EZEKIEL

University of Bombay, Fort, Bombay-1; 1967;

Pp. VIII+119; Rs 9.50.

This volume grew out of the lectures delivered by the author to the economic fraternity of the University of Bombay in July 1965 on a theme which is of considerable relevance to the Indian economy under economic plans. The author's central thesis is based essentially on hindsight, i.e., on the experience with India's Five-Year Plans. The investment orientation of the plans for the purpose of initiating a rapid pace of economic development has brought in its

trail some serious, perhaps avoidable, strains. It was not altogether unexpected that heavy, more than proportionate, investment in capital goods would give rise to such consequences. What was, however, not foreseen was its magnitude under the prevailing conditions, marked by inadequacies of control of consumption, savings and investment in the economy.

Based on hindsight, the book develops the thesis that a larger stress on consumption than on capital goods would have sponsored a rapid economic growth. Necessary mathematical demonstration supports the contention. The alternative proposition made by the author takes into account the factor of foreign trade and the assumption that there would not be difficulties in augmenting exports to the required degree. However, like the earlier emphasis on investment in capital goods, which is a rational exposition based on certain assumptions, not necessarily practical, the author also introduces assumptions that may be found equally questionable. While the first exercise has been tried already, the second one put forward by the author may hold no particular attraction in view of the apparently impractical nature of the assumptions.

We may firstly consider the assumption that there is no export bottleneck. This has been belied by the fact that apart from non-availability of adequate surplus in certain commodities and products, the large import-content in some of the non-traditional items makes the whole basis doubtful. Secondly, even when the surplus is there, the boost in export is not automatic and the investment in marketing may involve more stress than investment in capital goods. Thirdly, matching import of capital goods through export of consumer goods may be even less than theoretical, because deficits in one country may not be transformed into surplus or reduced deficits through the surplus in another country. There may indeed be a phenomenon of continuing deficit and surplus at the same time. But to push exports of consumption goods to the same countries from which imports of capital goods are made is difficult in the conditions that exist today. Lastly, the same difficulty will be there in attempting to boost exports of traditional goods to non-traditional markets for the purpose of import of capital goods. A number of factors including long-term possibilities of trade diversion, competition from other countries and nature of capital goods deemed necessary for development make for this difficulty.

As an alternative proposition, the thesis put forward by the author deserves the most serious attention. Perhaps the same idea of the author is reinforced by the bilateral trade agreements that many developing countries like India have found profitable to enter into. What requires to be considered in this context is whether this can be depended upon as a long-term connection based exclusively on the logic of economics rather than of politics. As the Foreword to the book says, "Though Dr. Ezekiel has not brought his theory to bear upon the actual choices in any country, it is obvious that his closely-knit reasoning, based upon incisive logic, has great empirical relevance to India".

—P. Chattopadhyay

A PRACTICAL GUIDE TO THE FOREIGN TRADE OF INDIA

By R.S. ARORA

National Publishing House, 26-A Jawahar Nagar, Delhi-7;
1967; Pp. 512; Rs 35.00.

While foreign trade has gained much in importance in the recent past, its handling has become far more technical than it used to be earlier. Innumerable documents required in the process not only demand a thorough knowledge of their understanding, but their timely submission with complete information also requires a good deal of promptness on the part of those engaged in the task. There is hardly a single book, which deals with the complexities of foreign trade as clearly as the book under review.

Before explaining the various procedures, the author briefs the readers in the very first chapter on the importance of foreign trade in the economy of a country. While describing the constituents of balance of payments, he enumerates the methods generally applied to reduce the gap between imports and exports. These are: cutting down imports; using gold reserves; securing aid, loans and investments from abroad; and increasing earnings from invisible and visible exports. He correctly contends that as a result of industrialisation in India, imports cannot be curtailed. External assistance carries the liability of servicing. The remedy, therefore, lies in expanded exports. But the increase in exports has not kept pace with the increase in imports due to various factors such as rise in incomes leading to increased domestic demand, leaving little for the purpose of export; tendency to make high profits in domestic market *vis-a-vis* exports; increase in the domestic cost of production of export goods because of inflation; decline in world demand for certain commodities; and keen competition from substitutes and other countries.

In order to lend impetus to exports, the author suggests certain measures like curbing domestic consumption of commodities selected for export; utilising excess capacity in export industries; streamlining licensing procedures, customs formalities and exchange control facilities; planning export strategy for capturing new markets; educating people about the importance of export trade; adopting most up-to-date methods and techniques of salesmanship and providing efficient after-sale service.

While exports have to expand, imports need to be screened so as to discourage those not necessary for industrialisation. In this context, the author deals with the rationale of import control and exchange control. He also deals with the delicate mechanism of movement of trade under bilateral trade and payments agreements entered into by India with the East European countries. He does not subscribe to the commonly held view that imports under this arrangement do not entail any expenditure of foreign exchange. Although rupees so

paid are not directly converted into foreign currency and are available to the countries concerned for either purchasing goods in India for export or for procuring services in India, yet in either case India would have received payment and thus the foreign exchange, which would have been earned as price of goods or remuneration for services, is lost to the country. Thus even though initially the price is paid in rupees, yet in the final analysis, India pays even for such imports in terms of foreign exchange.

In the subsequent chapters, sales of goods, carriage by sea and marine insurance have been discussed in detail. The readers are acquainted with the importance and implication of each term used in the process so as to safeguard against the disputes arising out of the interpretation of such terms.

Highlighting the trade gap, the author builds a case for export incentives with a view to pushing exports. Not only has the entire machinery created to administer the incentives scheme with rules and procedures followed in the process been dealt with adequately, but the different types of export incentives permissible for export of different items to various markets have also been mentioned so as to enable the exporters to avail themselves of these at the appropriate time.

The book has 49 appendices, which include various policy decisions, trade notices and amendments to the import trade control regulations announced by the Government from time to time.

By treating the subject exhaustively in a single volume, the author has done a service to all those concerned with foreign trade. With the background of his practical experience as Assistant Controller of Imports and Exports, Ministry of Commerce, he has brought out a practice-oriented book which, though not original, is yet commendable for presenting information of a very diverse nature at one place.

—*Attam Parkash*

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PACKAGE TESTING FOR EXPORT MARKETS

By Arabinda Ray

ON any discussions of export marketing, considerations of packaging—both consumer packaging and bulk packaging for transport—play an important part. However, in their essence, the packaging needs of all markets are the same. To this author, one of the deterrents to the development of export markets for Indian packaging and the consumer goods industries is the school of thought which advocates that different standards can be adopted for different markets. Such a practice may be possible for a jobbing company, but the majority of the output of the packaging industry comes from mass production lines which by definition use standardised practices where such differentiation is meaningless and almost impossible to achieve. Conversely, entries into export markets become relatively simple the moment domestic standards of the product and the package reach world market standards. It is no accident that the ready-made garments industry in India is becoming a successful export-earner and its quality and packaging standards are hardly improved upon in any other country.

CODE OF PRACTICE

2. In order to discuss testing one must first understand the attributes which are to be tested and the standards by which they have to be tested. On this front, there is still a lot of scope for clearing the air in this country. The word "standard" immediately conjures up the image of the Indian Standards Institution (ISI) and calls for certification against the standards laid down by this

body. What is overlooked is that the very competent standards laid down so ably by the ISI are really specification standards derived more often than not by reference to international standards, whereas when one talks about product and package testing one very often has in mind a performance standard for the specific purpose of use. There is an urgent necessity in this country to define performance standards *based on which* specification standards can be adequately drawn up by ISI. The newly formed Indian Institute of Packaging is working in collaboration with the ISI to give specification standards this element of realism. Out of these performance standards will evolve a "Code of Practice" tailored to specific packaging needs, as exists in Britain.

3. Take, for example, the case of corrugated cartons. There is an ISI standard, which lays down the specification for many different aspects of this package. One of these is dimensional tolerance, which specifies that the length and breadth must be within ± 2 mm of the nominal size. This may be a useful guide for the buyer for some extremely critical packs, but in the majority of the cases this is relatively unimportant and since on present equipment and with present standards of raw materials carton manufacturers find it extremely difficult to keep to within this dimensional tolerance the acceptance of the ISI standard suffers. When it comes to a case for the acceptance of corrugated cartons under Railway Risk, the dimensional tolerance is almost totally unimportant, but what is important is the bursting strength and water resistance which have to be pitched at a level higher than the worst hazards the package is likely to confront. The determination of these hazards and providing tests for materials against these in the laboratory is the function of the packaging technologist.

4. In the absence of precise determination of these hazards and proper testing facilities, which are a natural corollary, there is a tendency to design empirical standards which naturally run the danger of either overpacking, making the consignment unduly expensive for the purpose, or underpacking, exposing the consignment to disproportionately high risks of serious damage. The skill of product and package testing lies, therefore, in scientifically determining the optimum point at which the two factors balance each other out.

ACCEPTANCE SAMPLING

5. One other factor, which leads to high package cost indirectly, is the absence of scientific acceptance sampling procedures between buyers and sellers of packages. It has been said in the context of mass production that there is neither a buyer for *perfec-*

tion nor one for *rubbish*. The problem is generally one of striking a balance between quality and costs. This requires a great deal of sophistication on both sides and once again proper understanding of the risks involved. For example, the glass containers industry with its automatic blowing machines is known to produce about 5 per cent to 10 per cent defectives such as cracks and mould marks. Since the customers, particularly of glass vials and bottles, who pack pharmaceutical products, cannot accept such a high rate of defectives in the supplies, the glass industry today has no alternative but to carry out cent per cent piece-by-piece inspection of the entire production as a part and parcel of their processes. This often accounts for 10 per cent to 20 per cent of their total labour cost. At the same time, in the pharmaceutical industry, a number of men have to be employed for cent per cent inspection of ampoules filled with injectiles, because the very process of filling and sealing of ampoules often leads to blackspecks (due to charring), glass pieces and fibres inside the liquid. The incidence depending upon processing conditions is often as high as 10 per cent and the industry has no alternative but to weed out all defectives through cent per cent inspection knowing fully well that cent per cent inspection has its own failings. These examples illustrate how there is no escape from the costs of cent per cent inspection if the existing process capability of the manufacturer is not acceptable to the user. While this is understandable in the case of injectiles and other life-saving drugs, surely to apply the same standard leading to these added costs would be ridiculous for hairoil bottles.

6. Where the process capability of a package manufacturer is such that it would be impossible for him to operate on the "acceptable quality level", which is essential for the user industry for that package, the most economical way to go about the problem is to *design* the product suitably. For example, no amount of inspection and improvement in technology will ever ensure that metal particles will altogether be absent in long metal-nozzle eye ointment tubes. If such 100 per cent protection is desired, the cheapest and most effective answer will lie in incorporating a plastic nozzle in place of a metal nozzle. Many such examples could be given, both in respect of surface design and constructional design of packages.

PROTECTION AGAINST HAZARDS

7. The fundamental requirement of a package is that it should *protect* the contents. This protection must be conceived in both a static as well as a dynamic sense. The exact degree of protection will depend upon the shelf life required by the packer, the mode of transport and marketing conditions and related to the cost that the product can bear. At the same time, the package

must protect its contents against itself, i.e., there must be no chemical interaction between the container and what is inside it. There must be a careful choosing of packaging materials which do not impart odd flavours to foodstuffs or cause deterioration. Pack compatibility is, therefore, an important consideration which keeps busy the package-maker's research laboratories. It particularly applies to food products where shelf life, flavour and appearance have to be safeguarded. Every time a new product is to be packed, these laboratories ascertain what proposed packaging material will suit it, and if it does not, modify it, where possible, so that it does. For example, if an ointment is to be packed for direct application on the affected part, it would be the job of the package specialist not only to ensure that for the required shelf life it will stay in "factory-fresh" condition in the collapsible tube, but also whether in the interest of economy an aluminium rather than a pure tin tube can be used. It is quite possible that to prevent interaction between aluminium and the product, the tube will need to be internally lacquered, in which case the package scientist may have to go even further to see whether on the grounds of economy this cannot be avoided by adding an inhibitor to the ointment itself. During use, will the ointment on spilling out on the side of the tube damage its decoration? Then the closure has to be checked to see if the facing material for the wad is compatible with the product. Advanced technology is thus called upon to play its part to determine the suitability for its contents of almost every package material used—irrespective of whether it is made from paper, board, film, moulded plastics, foil, tinplate or glass.

8. In a dynamic sense, the package has to protect the contents against rapid change of environments, which movements of goods especially by air entail. The conditions in which production and packaging take place in a factory are vastly different from the environments to which the package will be exposed on its long and unpredictable journey to the ultimate consumer.

9. It will be clear from the above that no scientific testing can take place unless there is a fair idea of the hazards the particular package is likely to face. It would clearly be highly uneconomical to always design a product for the most stringent hazards. The degree of protection which the air-dropped defence supplies will require in the Himalayan region is obviously going to be quite different from what the normal civilian markets will ask for.

TESTING FACILITIES

10. Arrangements are being made to equip centres in India with testing facilities, which will be able to simulate the environ-

mental and journey hazards and test packages for this. This will apply both to consumer packages as well as bulk packages. When, for example, a consignment travels by air in the unpressurised cargo hold, it not only goes through a rapid change of environments in terms of temperature and pressure, but is also exposed to a high frequency low amplitude vibration. The consignment on a truck, on the other hand, does not have such rapid changes in environment but is subject to a low frequency high amplitude vibration. The railways subject consignments to tremendous impacts during shunting. The ships' holds probably do not have many mechanical hazards but do call for extreme climatic conditions. Stacking of consignments demands the examination of compressibility of the outer packaging. For export consignments, particularly, it is necessary to know precisely how the goods are expected to travel both from one country to another as also within the two countries.

EXPORT MARKETING

II. It may sound heretical to say this in a paper on export marketing, but there is excessive concern in India regarding the need to develop export packages *specifically suited* to likely overseas markets. The general standards of functional quality and appearance of all Indian packages—with the possible exception of glass bottles—have now reached a level well above the minimum needs of the most sophisticated markets. In order to make an entry with packaged goods in the world markets, two things and only two things need constantly to be borne in mind: (a) that our supplies should be economical, and (b) they should be functionally faultless. At the moment, there is excessive concern with trying to meet the specific needs of specific markets with shapes and fitments which call for non-standard production in India and add to costs. The consumer in the market abroad looks for quality in the content, functional properties in the package to preserve the quality of the content and reasonable attractiveness in the package, but he does not ask for a package specifying it to the last millimetre in diameter and in height, which Indian exporters often assume they want. What is going to secure the Indian exporters entry into the market is the ability to give a 5 per cent greater commission to the importer than what the European, Japanese or American suppliers of the competitive product give, which in reality means reduced costs. At the moment, there are built-in unnecessary hidden costs in Indian exports through (a) the lack of product and package testing facilities, which can determine the exact costs of providing adequate security; and (b) the cost of the insistence on separate standards for export as opposed to the home markets. In trying to export our spices in packaged form, we look at McCormick design containers and insist

that our containers should be made to the same size and with the same plastic fittings even if the quantities are only 5,000 containers against McCormick's 5 million. What this tacitly assumes is that the European housewife, when buying McCormick spices, decides on the basis of the shape of the container and the dispenser. Such thinking overlooks the strength of McCormick's marketing organisation, the consistent quality of the products and the cheap price, which are the sole guiding factors.

12. A case in point is the success of Indian canned prawns in America. Since the price and quality were right, the American importers asked Indian manufacturers to go ahead with the size of standard can which was immediately available in India instead of wasting time and money to go in for the size that was most popular in America. The Indian can established itself so well in the American market that when later the US standard can, which for the same volume is 12 per cent broader and 25 per cent squatter, became available, the Indian exporter preferred to remain on the original Indian standard can.

13. We have so far referred to product testing. When it comes to market testing for our products and packages, we often overlook the fact that 2 per cent of Indian population, to whom the majority of the Indian packaged goods are sold, are by and large a fair cross-section of the markets to which we are likely to sell the majority of our packaged goods. If the current Indian packages do not repel them, they will not repel the potential buyer anywhere in Asia, Africa or Eastern Europe. It is too much to expect that we will make entries into European and American markets with sophisticated consumer products like cosmetics. What we will sell there are processed foodstuffs, textiles, footwear, industrial products, etc. For these once again, functional requirements, proper volume linked to family size, and adequate labelling are all that will be required—not a specific size nor a specific appeal—so long as our prices are right. One must repeat here the story of Indian canned prawns.

A COMPARATIVE STUDY OF THE NEW AND OLD INCOME-TAX INCENTIVES FOR EXPORTS

By Ved P. Gandhi

I. INTRODUCTION

IN the *Finance Act, 1964*, two income-tax incentives were given to exports which became effective from April 1, 1964:

- (i) "an assessee being an Indian company or any other company which has made the prescribed arrangements for the declaration and payment of dividends in India or an assessee (other than a company) whose total income includes any profits and gains derived from the export of any goods or merchandise out of India, shall be entitled to a deduction from the amount of income-tax and super-tax with which he is chargeable of an amount equal to the income-tax and super-tax calculated respectively at one-tenth of the average rate of income-tax and of the average rate of the super-tax on the amount of such profits and gains included in the total income";
- (ii) "where an assessee of the type referred to in sub-clause (i) engaged in the manufacture of any articles in an industry specified in the First Schedule to Industries (Development and Regulation) Act, 1951 (excepting a few articles) has exported after the 28th day of February, 1963, such articles out of India, he shall be entitled in addition to the deduction of tax referred to in sub-clause (i), to a further deduction, from the amount of tax with which he is chargeable for the assessment year, of an amount equal to the income-tax and super-tax calculated respectively at the average rate of income-tax and the average rate of super-tax on an equal amount to two per cent of the sale proceeds receivable by him in respect of such export."

In the *Finance Act, 1965*, a scheme of Tax Credit Certificates for exports was initiated. Under the provisions of this scheme:

- (iii) "a person who exports any goods or merchandise (listed in a separate schedule) out of India after the 28th day of February, 1965, and receives the sale proceeds thereof in India in accordance with the Foreign Exchange Regu-

lation Act, 1947, and the rules made thereunder, shall be granted a tax credit certificate for an amount calculated at a rate (varying between 2 per cent to 15 per cent and) not exceeding 15 per cent on the amount of such sale proceeds."

With the devaluation of the rupee on June 6, 1966, all these tax incentives [for brevity, they will be referred to as income-tax incentive (i), (ii) and (iii)] were withdrawn and a final notification to this effect was given in the *Finance Act, 1967*.

In the *Finance Bill, 1968*, one major income-tax incentive for exports has been proposed, which is as follows:

"Where an assessee, being a domestic company or a person (other than a company) who is a resident in India, has incurred after the 29th day of February, 1968, whether directly or in association with any other person, any expenditure not being in the nature of capital expenditure or personal expenses of the assessee..., he shall...be allowed a deduction of a sum equal to one and one-third times the amount of such expenditure incurred during the previous year."

The following expenditures "incurred wholly and exclusively" in the development of export markets are considered eligible in this connection:

- (a) Advertisement or publicity outside India;
- (b) Obtaining information regarding markets outside India;
- (c) Distribution, supply or provision of goods outside India;
- (d) Maintenance outside India of a branch, office or agency for the promotion of sales;
- (e) Preparation and submission of tenders for the supply of goods outside India;
- (f) Furnishing of samples or technical information for the promotion of sales;
- (g) Travelling outside India in connection with the promotion of sales; and
- (h) Any other sales promotional (revenue) expenditure.

The purpose of this note is to compare the value of the pre-devaluation income-tax incentives given to exports with those proposed in the current Budget. Certain implications of these income-tax incentives are also highlighted in the process. In the end, guidelines to make the income-tax incentives for exports more useful are suggested,

II. PRE-DEVALUATION INCOME-TAX INCENTIVES

The only tax incentive before devaluation, to which all tax-payers, excepting foreign companies, were entitled was 10 per cent of the amount of income-tax payable on profits attributable to the exports of goods or merchandise out of India. The tax saving (TS) of the tax-payer due to exports was, therefore, equal to 1/10th of the average rate of tax of the tax-payer (t) multiplied by the profits from exports (P_e):

$$TS = 0.10 \cdot t \cdot P_e \quad \dots(1)$$

The tax-payer, who manufactured any one of the articles listed in the First Schedule of the Industries (Development and Regulation) Act, 1951 (subject to certain exclusions), was also entitled to a rebate calculated on the average rate of the tax applicable to his total income on the amount equal to 2 per cent of his export sales or sales in India to a person who exported.

Thus his additional tax saving due to his exports was equal to 2 per cent of the average rate of his tax multiplied by his export proceeds (E):

$$TS = 0.02 \cdot t \cdot E \quad \dots(2)$$

The tax-payers in certain selected industries were also entitled to a Tax Credit Certificate the value of which varied between 2 per cent to 15 per cent of the export proceeds. In their case, the additional tax saving was to be equal to the prescribed percentage (d) multiplied by the export proceeds (E):

$$TS = d \cdot E \quad \dots(3)$$

Apparently enough, the minimum tax saving due to the income-tax incentives for exports in the two years prior to the devaluation was as given in equation (1) above and the maximum tax saving was as given by the sum of equations (1) to (3) above.

In order to analyse the value of these income-tax incentives, let us assume that a tax-payer's decision at the margin is influenced by the proportion by which his tax liability is reduced and after-tax-profitability is increased. Thus a crucial index for an analysis of the value of the income-tax incentives for exports will be the ratio of tax saving (TS) to the profits and gains (P) of the tax-payer.

Consider the case of a tax-payer who enjoyed the maximum tax savings from the tax incentives. The TS/P in his case is given in the following equation:

$$\frac{TS}{P} = \frac{\left[0.10 \cdot t \cdot \frac{P_e}{E} \cdot \frac{E}{S} \cdot S \right] + \left[0.02 \cdot t \cdot \frac{E}{S} \cdot S \right] + \left[d \cdot \frac{E}{S} \cdot S \right]}{\frac{P}{S} \cdot S}$$

which is

$$= \frac{\frac{E}{S} \left[t \left(0.10 + \frac{P_e}{E} + 0.02 \right) + d \right]}{\frac{P}{S}} \quad \dots(4)$$

The relationship derived in equation (4) suggests five interesting propositions:

- (1) Higher the ratio of export proceeds of the tax-payer to his total sale proceeds $\left[\frac{E}{S} \right]$, higher will be the tax saving as a proportion of his profits $\left[\frac{TS}{P} \right]$.
- (2) Higher the average tax rate of the tax of the tax-payer (t), higher will be the ratio of tax-saving to his profits $\left[\frac{TS}{P} \right]$.
- (3) Higher the profit margin of the tax-payer on his exports $\left[\frac{P_e}{E} \right]$, higher will be the tax saving as a proportion of his profits $\left[\frac{TS}{P} \right]$.
- (4) Higher the prescribed percentage of the tax credit applicable in case of a particular tax-payer (d), higher will be the ratio of tax saving to his profits $\left[\frac{TS}{P} \right]$.
- (5) Higher the profit margin enjoyed by the tax-payer on his total sales $\left[\frac{P}{S} \right]$, lower will be the value of tax incentives for exports as a proportion of tax-payer's profits $\left[\frac{TS}{P} \right]$.

Propositions (2), (3) and (5) appear to be interesting and need comments.

Proposition (2) implies that the tax-payer whose average rate of the tax was high benefited more from the income-tax incentives for exports than one whose average rate of the tax was low. As is well known, in the Indian Income-Tax, the tax rate varies with the form of organisation. This implies that the benefit of export incentives varied depending upon whether the tax-payer happened to be an individual, an unregistered firm, a registered firm, a co-operative society, a private limited company, or a public limited company (and here whether it was in the priority industry or a non-priority industry).

This is an interesting result, as this implies that the income-tax incentives for exports, before devaluation, were related to a less relevant factor like the form of organisation rather than the availability of exportable surplus or unutilised capacity in the industry. Needless to mention, this resulted from the fact that the income-tax incentives for exports were related to the average rate of the tax of the tax-payer.

Proposition (3) implies that if a tax-payer earned a large profit margin on his exports, his tax saving as a proportion of his profits was also to be larger. This definitely was a noteworthy feature of the income-tax incentive for exports insofar as it seemed to encourage the tax-payers to increase their profits on exports in order to enjoy larger tax saving in terms of their total profits.

Proposition (5) is surprising, as it implies that between two tax-payers if one earned a larger profit margin on sales than the other, his tax savings as a percentage of his profits were smaller. This naturally worked as a built-in discrimination against the more efficient tax-payer.

How effective were the pre-devaluation income-tax incentives to exports?

Assuming that the major hindrance to Indian exports has been a gap between the profits (P_d) on domestic sales (D) and the profits (P_e) on export proceeds (E), it is evident, then, that for the income-tax incentive (i) above to be effective, the ratio of tax saving to the export proceeds $\left[\frac{TS}{E} \right]$ must make up, or more than make up, the difference between the domestic and export profitabilities, i.e.,

$$\left[\frac{0.10 \cdot t \cdot P_e}{E} \right] \geq \left[\frac{P_d}{D} - \frac{P_e}{E} \right]$$

Or, that

$$\frac{P_e}{E} \left[1 + 0.10 \cdot t \right] \geq \left[\frac{P_d}{D} \right]$$

Assuming that $t=0.50$ (the general rate of income-tax on companies)

$$\left[\frac{P_e}{E} \right] \geq \left[\frac{P_d/D}{1.05} \right]$$

Or

$$\left[\frac{P_e}{E} \right] \geq (0.94) \left[\frac{P_d}{D} \right] \quad \dots(5)$$

It follows from these simple calculations that unless the profit margin on exports is about 94 per cent of the profit margin on the

domestic sales, the income-tax incentive (i) for exports available to all tax-payers in the pre-devaluation period would not encourage exports significantly. No wonder the income-tax incentives for exports failed to produce the desired results!

Of course, this need not necessarily be the situation in case of tax-payers who enjoyed the tax incentives (i), (ii) and (iii) given to exports in the pre-devaluation days. In such cases, there would be a definite encouragement to exports if:

$$\frac{E \left[t \left(0.10 \cdot \frac{P_e}{E} + 0.02 \right) + d \right]}{E} \geq \left[\frac{P_d}{D} - \frac{P_e}{E} \right]$$

Or

$$\frac{P_e}{E} \left[1 + 0.10 \cdot t \right] + 0.02 \cdot t + d \geq \frac{P_d}{D}$$

Assuming that $t = 0.50$ (the general rate of income-tax on companies)

$d = 0.15$ (the maximum tax credit)

$$\frac{P_e}{E} + 0.152 \geq \frac{P_d/D}{1.05} \quad \dots(6)$$

The effect of all the three tax incentives taken together can be seen from the illustration where $P_d/D = 0.20$. Here exports would be encouraged even when P_e/E is only 3 per cent or so.

It appears, therefore, that the total saving due to all the pre-devaluation income-tax incentives for exports was such as could more than offset a large difference between the profit margins on domestic sales and on exports.

III. POST-DEVALUATION INCOME-TAX INCENTIVES

The *Finance Bill, 1968*, provides a tax incentive to all tax-payers excepting foreign companies. The tax saving due to this tax incentive is expected to be:

$$TS = 0.33 \cdot t \cdot RE \quad \dots(7)$$

where RE stands for revenue expenditure on the development of the export market.

IV. COMPARISON

Comparing the value of the pre-devaluation tax incentive (i) available to all the tax-payers with the value of the proposed tax

incentive, one can say that the value of the latter will be greater than that of the former when

$$0.33 \cdot t \cdot RE > 0.10 \cdot t \cdot P_e$$

Or, when

$$\frac{RE}{P_e} > 0.33 \quad \dots(8)$$

The implication of inequality (8) is that the tax incentive proposed in the current Budget would encourage exports more than the tax incentive (i) available in the pre-devaluation period only where the revenue expenditure on the development of export market is more than 1/3rd of the total profits from exports. Of course, such cases may not be very many.

Compare now the present incentive with the tax incentives (i) and (ii) given to exports in the pre-devaluation days. The former will be more effective than the latter provided

$$0.33 \cdot t \cdot RE \geq 0.10 \cdot t \cdot P_e + 0.02 \cdot t \cdot E$$

Or

$$(3.3) \frac{RE}{E} \geq \frac{P_e}{E} + 0.20 \quad \dots(9)$$

To have a feel of the implications of this, assume that $RE/E=0.10$. In such a case, P_e/E must equal 0.13 if exports are to be encouraged. This too is far from reality in case of many of our exports.

The current tax incentive for export may, therefore, not act as an effective lever to the country's exports.

V. SUMMARY AND CONCLUSIONS

To sum up:

- (1) The pre-devaluation tax incentives were related more to the form of organisation than to the exportable surplus available with the industries.
- (2) The pre-devaluation tax incentives contained in them a built-in discrimination against the more efficient firms.
- (3) The income-tax incentive given to exports in the current Budget is also related to the form of organisation insofar as it also depends upon the average tax rate of the taxpayer and not to the unutilised capacity or the exportable surplus of the industries.
- (4) The value of the proposed tax incentive given to exports will be less than the value of the tax incentive (i) given to exports in the two years preceding devaluation for all

those firms whose revenue expenditure on the development of the export markets is less than 1/3rd of their profits from exports.

- (5) Even the industries covered by the First Schedule of the Industries (Development and Regulation) Act, 1951, will stand to lose from the proposed income-tax incentive to exports when compared with the tax incentives enjoyed by them so far unless their profit margin on exports is very high and/or their exports competitive enough in the world markets.

In the light of these findings, one may suggest (a) that the tax incentives ought to be unrelated to the tax rates as far as possible, and (b) they should be adequate to make up the difference between the domestic profitability and the export profitability if they are to prove effective.

To make the income-tax incentives more useful, it will be desirable first to look into the economics of industries to see which ones of them had the export potential which the country could fruitfully exploit. After this has been done, the Government would be well-advised to grant a total exemption of their exports (over some base year) from income taxation for a period of 10 to 15 years as in the case of Ireland, Iran and to some extent, Mexico. Only a total exemption of exports from the purview of income taxation can be expected to ensure a lasting effect of the income-tax incentives on the country's exports.

COST DATA—COLLECTION AND UTILISATION

By S. Subramanian & N. Krishnan

A paper on cost reduction was prepared by the Indian Institute of Foreign Trade for consideration by the Board of Trade at its meeting held in Delhi in April 1966. It seemed clear from the study made by the Institute that India's exports were generally incompetent in the world markets on account of a rise in raw material prices, wages and taxes, apart from underutilisation of installed capacity and other inherent factors. The Board, therefore, considered it necessary that a continuous watch should be kept on the possibilities of cost stabilisation and reduction and the data needed for the purpose should be collected and maintained on a continuous basis. As recommended by the Board, the subject was considered in greater detail by a Workshop organised by the Institute in September 1967.

2. The purpose in collecting cost data is not only to rationalise production but even more importantly to increase the tempo of the export drive in every possible way. The former is easy to comprehend but the latter requires elucidation particularly in respect of the manner of utilisation of the data for the purpose. It is necessary in this connection to undertake a threefold responsibility, viz.,

- (a) to assist individual industrial units to reduce costs by focussing attention on weak points through comparison with norms worked out through analysis of productivity in relation to imports, management and overheads ;
- (b) to keep the Government informed of the impact of taxes to enable the authorities to modify them where necessary with expedition; and
- (c) to keep both Government and industry posted with up-to-date details regarding the price trends, demand and such other factors to enable them to chalk out their production/sale programmes efficiently.

3. Given broad agreement that such data are essential for taking appropriate action to step up the export potential, there cannot be any difference of opinion on the need to gather them.

DATA TO BE COLLECTED

4. Industrywise data for the factory sector, particularly in respect of consumption of raw materials by value, power and fuel consumed and value added by manufacture are available in the *Annual Survey of Industries* brought out by the Central Statistical Organisation. If study of cost reduction is confined to industrial analysis on an overall basis rather than for individual units, these published figures could be of help. A broad picture of the chief constituents of ex-factory cost like raw materials, salaries and wages, depreciation on equipment, power and fuel, and overheads would also be available either readily or in raw form from the records of other agencies like the Income-tax Department, Company Law Administration and Labour Bureau. These data will, however, have to be collected and coordinated with supplementary information regarding—

- (a) the existing production capacity and the production in the country and its present utilisation with a view to forming an idea of the industry's potential and ascertaining reasons for underutilisation of capacity wherever it exists, and
 - (b) the actual production costs and the production broken down by element/function and classified into fixed and variable costs for the purpose of locating directions in which cost reduction is possible.
5. Actual details will depend largely upon the type of industry, but the general pattern of requirements can be described below:
- (1) *Raw materials*—Nomenclature of raw materials, the consumption of each by quantity and value, wastage, imported or indigenous, types, values and so on.
 - (2) *Direct wages*—Number of employed, divided into departments, basic wages and DA, fringe benefits, labour utilisation in terms of man-hours, overtime and the like.
 - (3) *Supervisory salaries*—similar to wages above.
 - (4) *Power and fuel*—Quantity and value and tax paid, etc.
 - (5) *Depreciation*—Factory building, machinery, etc.
 - (6) *Factory overheads* including salaries of factory staff.
 - (7) *Administrative expenses*—Office expenses, etc.
 - (8) *Selling/distribution expenses* including packing, storing, despatching and transporting.
 - (9) *Selling agency commission, advertising and publicity costs* separately.

6. The above is a broad outline of controllable items of cost. Taxation, direct and indirect, and the impact of other regulatory measures are known as uncontrolled factors, in accounting parlance. It is necessary to know the exact impact of such elements on the cost of production. Data in respect of these items can be obtained from the various units. The incidence of certain duties, which are leviable on finished products, can easily be located. There are other items like sales tax on raw materials and components, electricity duty, which can also be assessed if data are available. It is difficult to identify the duties and taxes included in the purchase price of components, spares, machinery, etc., unless these items are segregated at the time of purchase itself.

7. Other information of a statistical nature like source of raw materials, seasonality of supply, indigenous availability, the time lag between purchase order and actual supply of raw materials, import of machinery and the price levels will also have to be built up side by side.

EXISTING AUTHORITY FOR THE COLLECTION OF DATA

8. At present, there are several enactments or orders under which cost data are collected by Government agencies. In the case of individual commodities, there are control orders, as for cotton textiles and jute. In addition, more general statutes like (i) Indian Companies Act of 1956, (ii) Industries (Development & Regulation) Act, 1951, (iii) Tariff Commission Act, 1951, and (iv) Collection of Statistics Act, 1953, also empower the concerned organisations to gather data required by them in connection with enquiries undertaken under powers given to them.

- (i) The Indian Companies Act (1956) is a comprehensive enactment under which the Company Law Administration is empowered to collect different kinds of information from joint stock companies. Recently a new Section 233(b) has been introduced into the Act, which provides for cost audit of companies covered by Section 201(1)(d) where needed. The Company Law Board has also evolved standard forms for maintaining cost records by the concerned industries, keeping the requirements of cost audit in view. Even assuming that the Board would be willing to make available the information in their possession for cost study purposes by another organisation, the limitation is there that the data may not be found comprehensive enough. In any case, it will be advisable for the Board to have a cost account unit under its own auspices to process the

information collected and present aggregates or averages for scientific study to other organisations.

- (ii) Increased productivity, economy of scale of operation and control of expenditure are important points for study as a basis for cost reduction. Such a study would also reveal the need for improved manufacturing and handling processes and improved machinery. This sort of study can be undertaken in respect of the scheduled industries under Sections 15 and 16 of the Industries (Development & Regulation) Act, 1951. The productivity team, making such a confidential enquiry, as and where necessary, can make available the results in a concise form, without revealing the individual weaknesses found. Recommendations for improvement can be conveyed directly to the units concerned.
- (iii) Section 20(2) of the Tariff Commission Act of 1951 empowers the Commission to call for cost data from the concerned industries in the context of its protection and price inquiries.
- (iv) The Collection of Statistics Act, 1953, is more in the nature of a general Act empowering the "appropriate Government" to collect statistics of all kinds relating to industries, trade and commerce. Section 3 of the Act details the type of statistics that can be collected under the Act. Sections 3(a) and 3(b) read as follows:
 - (a) Any matter relating to any industry or class of industries,
 - (b) any matter relating to any commercial or industrial concern or class of commercial or industrial concerns and in particular any matter relating to factories."

9. From the above, it would appear as if any information can be called for from an industrial or a commercial concern. Sub-section (c) under Section 3 of this Act has been devoted to matters relating to welfare of labour and conditions of labour and Section 14 to the powers of the appropriate Government to make rules and lay down forms in which information is to be furnished. It will be clear that in spite of the generality of the provisions in Section 3, specific rules have to be made. These rules are also to be laid before Parliament. Hence if the information already being collected under this Act proves insufficient for our purpose and requires to be supplemented, it becomes necessary to assume further powers to facilitate the collection of the required data.

10. In paragraphs 4 and 9, we have discussed the inadequacy of the published data available at present as well as of the existing authority. We therefore feel—of course assuming that we do not want to go in for any fresh enactment *de novo*—the Collection of Statistics Act is the proper authority for collection of the type of data required. For this purpose, it may be necessary to undertake a suitable amendment of this Act and frame the necessary rules under Section 14 thereof. Section 4 of this Act empowers the Government to declare an officer to be the Statistics Authority. When the Cost Study Units, proposed later in paragraph 14, are set up, these units may be declared as “Statistics Authority” for this purpose. To ensure speedy collection of data, the concerned authority can be given powers similar to those in Section 5 of the Act for serving a notice on the person(s) body or institution from whom data are required as also the authority to prescribe forms and amend them from time to time.

11. In designing the standard forms for collecting the requisite statistics, the needs of the other agencies named above should also be borne in mind. The rationalisation of the needs of other agencies is more necessary now than ever before because of the resistance shown by trade and industry recently to overlapping demands on them for identical information.

SAFEGUARDS AGAINST UNAUTHORISED USE OF THE DATA

12. Clearly, information under headings (b) and (c) of para 2 is required only in an aggregate form for the industry as a whole or at the most for all productive units similarly placed, such as located in the same State or with comparable capacity range. This generally has the understandable advantage that information for individual units would not be disclosed. On the other hand, inter-unit comparison bristles with difficulties. If the deficiencies of a particular unit with respect to others and/or average are made known to other managements, inevitably it will be construed as disclosure or misuse of competing units' information, unless the identity of each individual unit is kept secret at all stages. The real objection would be against disclosing the most vital information to Government departments particularly revenue authorities, trade control and police. There is a good deal of suspicion against research organisations taking advantage of confidential information. The balance of advantage, therefore, lies in not worsening the situation but in maintaining the present position, i.e., the information collected for a specific purpose by any agency under an assurance of confidentiality should not be available to any other agency as a matter of course.

AGENCY FOR COLLECTION OF COST DATA

13. Practically all the data referred to earlier can come from the manufacturing units themselves. Cost data and figures pertaining to the rated capacity, the extent of its utilisation, plans for modernisation and expansion or production, sales, prices in the foreign countries, the cost trends in the competing countries, the demand and supply position in the international markets and related information will be of considerable relevance to cost studies. The background material will in any case have to be built up from other agencies like marketing organisations, economic intelligence surveys by trade associations and chambers of commerce. It may also be equally necessary to draw upon Government Departments, particularly Commercial Representatives abroad and the Reserve Bank of India.

14. The Tariff Commission Review Committee under Dr. V.K. R.V. Rao, which had gone into the question, expressed the opinion that cost reduction vigilance studies were rather of the nature of an executive function and for this reason, such studies may appropriately be undertaken by an agency (other than Tariff Commission) as an integral part of the Government's watch on prices. Therefore, it would seem appropriate to establish an independent Cost Study Unit under the Chief Cost Accounts Officer of the Government, with sub-units for important groups of commodities. Each sub-unit may be headed by a qualified Cost Accounts expert with experience in the concerned industry assisted by an industrial engineer/chemist and an economist (when necessary) preferably drafted on short-term deputation from research organisations and laboratories dealing with the type of industry taken for study by the Cost Study Unit from time to time.

15. The prevailing shortage of trained Cost Accountants may cause a hitch in the proposed Scheme. However, a training project thought out and worked in close consultation and cooperation with Institute of Cost & Works Accountants will within two or three years begin to yield a steady supply of experts for manning the proposed units adequately in all respects.

COSTING OF EXPORTS

16. It is arguable that because of a conservative cost accounting outlook many Indian firms have been apt to underestimate the possible advantages of taking marginal rather than average costs as the basis of their calculations and have, therefore, shown a temperamental reluctance to export. If instead of proceeding on the basis of average cost per unit of output, which will include overheads, they took the *marginal* cost of producing an extra unit, they would

find that this extra is fairly small even in the highly involved sections, e.g., of the engineering industry, which require highly expensive inputs. In short, the traditional accounting methods tend to show that firms have to make a sacrifice in exporting their production, which could be sold at a greater profit at home, but clearly the home market has its inherent limits. It is possible that the effort to break into the export market will by itself lead to economies of scale and thus have the beneficial effect of rendering the product cheaper in the home market as well. Then, however, a vicious circle will start because when the home market becomes even cheaper than before, exporting will *ipso facto* be considered still more unprofitable.

17. There has been some discussion lately of the merits of a tax on value added (TVA) as a factor in reducing export costs. The tax works in the following way: Suppose supplier A sells raw materials to producer B. The invoice will include a tax of X per cent and the purchaser will enter in his books the net value of the goods and also the amount of tax. B then processes these raw materials and sells the output to C. Then B will include in his invoice price to C a tax at X per cent, say, on the added value of manufacture but eventually he will deduct the tax invoiced to him by A. The exporter D of the same goods is entitled to a refund of the entire TVA on the goods exported. Now here is a complicated accounting problem. Since the exporter is entitled to reclaim the whole amount of the TVA paid throughout the entire transaction from the beginning to the end, there is a large refund of tax which serves as a substantial incentive to export goods out of the country rather than plump for the home market. The idea is relatively new but it may be expected to catch on in the context of the present drive.

18. There are many such problems which arise in the costing of exports. There is, therefore, a strong case for an independent body like the Institute of Cost & Works Accountants sponsoring a conference or a series of conferences of experts on the subject with a view to helping firms genuinely interested in exporting to find out if and in what manner they have in fact been underestimating the profitability of exporting as such. In any case, it seems to be time that the feeling that accounting methods have generated the masterly inactivity of many producers on the export front was cleared once and for all.

RECENT TRENDS IN EEC's TRADE WITH AFRICAN ASSOCIATES

By Madan M. Sauldie

“THE Convention of Yaounde is a political undertaking by six rich European countries to increase the trade of the Associates”, said Mr. Armengaud, a French Senator of the Parliament of the Association. He quoted in his support Article I of the Convention, which clearly states that the aim of the Convention is “to promote an increase of trade between the Associated States and the Member States, strengthening their economic relations and the economic independence of the Associated States.”

Although the Yaounde Convention of Association between 18 African countries* and the EEC had often been dubbed in the past as a “neocolonialist design”, the one-time vociferous critics of the Association Convention have now turned into mute applicants for a similar arrangement for themselves. What are the reasons behind this new trend on the part of the African States to get into the ECM?

EVENTS LEADING TO THE YAOUNDE CONVENTION

For an answer to this question, one has to go into the events that led to the signing of the Yaounde Convention and the benefits, if any, that have accrued to the Associates. When the Treaty setting up the European Economic Community was signed in Rome on March 25, 1957, all the present Associated African States were colonies of one or the other of the six European powers. Even though the emergence of a new economic entity made definite fundamental difference to them, these countries had absolutely no say in the negotiations preceding the Treaty of Rome.

Initially, the idea of participation of African colonies in the new arrangement of the European Common Market was designed, in the main, to protect the interests of the French colonies, because, except for the Congo-Kinshasa, the two Belgian trust territories of Rwanda and Burundi and Somaliland, all the territories associated in 1957 were French-controlled or protected. For some time, there was

*Burundi, Cameroon, Central African Republic, Congo-Kinshasa, Congo-Brazzaville, Chad, Dahomey, Gabon, Ivory Coast, Mali, Mauritania, Malagasy, Niger, Rwanda, Senegal, Somalia, Togo and Upper Volta.

quite a strong resistance from France's partners in the EEC against this special treatment for these countries, but France persisted and her efforts culminated in a meeting between the French Premier and the German Chancellor towards the end of the same year, which made the inclusion of these countries into the Treaty provisions possible.

Although most of these States had already been closely linked to the French economy; now, by stages, they were required to dismantle their tariff barriers to the other five of the EEC as well. France's plan, in fact, was that her territories in Africa be completely integrated into the European Customs Union, whereby she would be able to allow her partners to share her markets in Africa and in return she would persuade them to share the financial burden of the development of these countries. They were, therefore, linked to Europe under Part IV of the Rome Treaty, and in theory to one another too, in a customs union and France's other five partners agreed that the territories should benefit from protection, particularly for their industrial development, from competition within the ECM. They also agreed to share the aid burdens.

But despite the Part IV provisions, the arrangement was initially to be in operation only for five years. This part commitment was the result of a fundamental difference of approach between France, on the one hand, and Germany and Holland, on the other. Broadly speaking, France (somewhat equivocally backed by Belgium) considered association as a stepping-stone for stronger relations in future between Europe and Africa, and Germany and Holland appeared more concerned with European unity than the revival of European influence in the lost territories. This divergence lives on even after 11 years of EEC's existence, although France continues to carry the day on almost all issues of importance, including the controversial British bid to enter the ECM.

The achievement of independence by these African States in 1960 and after did not make any material difference to their association with the European Community. Only Guinea, which had become independent in 1958 by breaking off with France, chose to dissociate herself from the EEC links. But the emergence of these States into independent nationhood did have a significant impact on the renegotiation of the five-year implementing Convention which was to expire in 1962. As a result, three main issues cropped up that were to determine the nature and content of future relations between the eighteen of Africa and the six of Europe.

Firstly, the Associates raised their voice for an institutional machinery for regular consultation with them. On this point, they won when the new implementing convention provided for a "decision-

making" Council of Ministers, a consultative Parliamentary conference and an administrative Association Committee. The second demand related to aid and its allied issue of export subsidies. The first convention had provided for a Development Fund of \$580 million, all in grants, of which France had agreed to bear the major burden. During 1961-62 negotiations, the Associates demanded an upward revision of the quantum of aid. As a result, the Fund had to be raised to \$780 million of which a small proportion was in the form of loans.

On the question of export subsidies, Holland and Germany insisted that these be gradually scaled down and a part of the increased aid be channelled towards "aid to production". Although there was general consensus in its favour, the fact remains that while these subsidies came down, so did the Fund's "aid to production", resulting in a rapid decrease of the overall aid from the Six to the Eighteen.

The third issue was in respect of trade preferences. The associates put up a tough fight for getting as many preferences as possible. But even though France, quite expectedly, agreed to grant some concessions, her other partners and the United States of America and Britain stood in the way and a good many preferences were reduced.

These internal and external forces have played a definite part in the functioning of the Association system. In fact, the breakdown in the negotiations for British entry into the European Common Market in 1962-63 delayed the coming into force until June 1964 for the second, better-known, Yaounde Convention for which the agreement had been reached a year earlier.

The Yaounde Convention agreement superseded the interim agreement and exceeded it by \$47 million in providing for financial assistance from the Six to the Eighteen. The total financial assistance provided for amounted to \$667 million—\$470 million in development capital and \$197 million for diversification of trade—besides providing for a step-by-step creation of a free-trade area. But despite the somewhat mixed success of the Associates in these negotiations, prejudices against the Association arrangement were fading out and parallel moves were developing among non-Associate African countries to seek similar arrangements with the EEC. Nigeria was already knocking at its door.

Nigeria's application for association widened the EEC's horizons in Africa. The negotiations took a long time, partly because Nigeria baulked at the political implications of an agreement on the lines of the Yaounde Convention. But in the end Nigeria conceded

an important point: though Nigerian trade concessions to the Six were minimal, they were nevertheless exclusive.

The agreement with Nigeria, signed in Lagos on July 16, 1966, made that country the first Commonwealth and 19th African country to join the European Common Market. The agreement provided for EEC preferences for all Nigerian exports but quotas were fixed in respect of four principal exports, namely, cocoa, groundnut oil, palm oil and plywood. The quotas, in the first instance, were the equivalent of Nigeria's average annual exports in 1962-64 and were to be raised by 3 per cent annually to keep pace with the increase in her production. For the year 1967, duty-free quotas were 73,000 metric tonnes for cocoa, 32,900 tonnes for palm oil, 6,900 tonnes for groundnut oil and 590 tonnes for plywood. In return, Nigeria agreed to grant tariff preferences to 26 items of export from the ECM. Valuing at \$9.7 million, these products accounted for 4 per cent of Nigeria's total imports from the EEC in 1965.

Following the ECM-Nigerian agreement, three East African countries—Kenya, Uganda and Tanzania—also reactivate their efforts by renewing their request (made firstly in 1963) to enter the European Common Market. Having failed in two negotiating sessions, they are now likely to accept the principle of exclusive reciprocity.

The EEC-East Africa negotiations have weathered many a storm. There was a complete stalemate at the time the East African countries rejected the principle of reciprocity as a basis for the grant of preferences by the EEC. It was only in March 1967 that the East Africans agreed to a reciprocal lowering of customs tariffs. Previously, they had insisted upon their own products being sold in the European community on preferential terms while themselves maintaining import duties on the Community's products. But France did not want to offend the 18 Afro-Malagasy countries and West Germany was annoyed when Tanzania recognised German Democratic Republic.

In March this year, the EEC, however, agreed on terms under which a special committee is to negotiate association between the Common Market and East Africa. If subsequent talks succeed, the East African group will benefit under some trade preferences in its trade with the European Community—but only until May 31 next year. So it may be that 22 countries will soon have formalised free trade area agreements with the European Community. The Nigerian agreement ends on May 31, 1969, the same date on which the second implementing (Yaounde) convention expires. No doubt, if there is an agreement between East African countries and the EEC, it will also end then. The EEC is under obligation to start

negotiations for a third implementing convention and in Nigeria's case a new agreement, at least a year before these expire. The negotiations, therefore, begin on July 23 this year.

RESULTS OF THE ASSOCIATION

While Nigeria has not been able to reap the full fruits of its long-drawn-out exercise of seeking association primarily because of the civil war, which has hit the country's exports adversely, the discomfiture of the 18 has been no less pronounced.

President Hamani Diori of Niger, Chairman of the OCAM—the body comprising 14 of the 18 African Associates of the EEC—has more than once made known his views, which have been echoed and re-echoed in recent conferences of Yaounde institutions such as the Eur-African Parliamentary Conference and the Council of Association. He has again reiterated recently that the Associates' trade with the Six has not expanded as they had hoped for. In spite of the Yaounde Convention, he maintained, the Community's trade with non-associated States of Africa and Latin America has increased much more rapidly than with the Associates. He has also attacked the lack of interest in the Community towards stabilisation agreements for tropical agricultural produce of the Associates noting that the Six themselves have established strong market organisations for their own agricultural products. For example, for sugar the Six were envisaging a support price more than eight times the world price and the differentiation between the world and the Community prices for oils and fats was between 72 per cent and 88 per cent. This latter is of particular concern to several West African countries because oils and fats (for which Associates no longer get subsidised prices from France) fall into the category of "homologues et concurrents"—products where the Six and the Eighteen compete. This will undoubtedly be one of the main points of discussion in the projected year-long negotiations.

Other questions likely to come up include the form of the new convention—whether it is to last another five years or whether it is to be a permanent treaty with protocols which can be adjusted as occasions demand; and what the position should be of the States that have not yet fully ratified Yaounde (all the former French colonies, Somalia and Rwanda have ratified it and Burundi and Togo have committed themselves to full ratification by July 1968. There remains only Congo-Kinshasa, whose whole tariff position has been historically different and free trade-oriented and has, therefore, asked for more time to make adjustments). The Associated countries would also demand preferential treatment from the European Development Fund in the form of grants rather than loans. The

position of the Associates *vis-a-vis* not only other African countries but the whole of the third world, will have to be redefined.

ECM'S TRADE WITH THE ASSOCIATES

The disenchantment of Associates over their trade with the EEC countries is clearly borne out by the facts contained in a recent report of the EEC Commission on the development of trade between the Associates and the EEC. Before, however, analysing the trade pattern between the Six and Eighteen it might be useful to clear an assumption that affects this trade pattern. The assumption is that EEC's trade with the African associates is a very small proportion of the Community's total external trade—for EEC imports from the Eighteen, the proportion was 4.3 per cent in 1964, 4 per cent in 1965 and 4.3 per cent in 1966. But even though this evidently is a modest proportion from the EEC's side, for the Associates it covers a major part of their foreign trade.

But as the EEC Commission's report points out, the "stage which the EAMA (Etats Africain et Malagaches Associes) have reached in marketing for export and in promotion of their products on the markets of the EEC are, with the exception of France, still embryonic".

In view of the rather limited range of products the Eighteen can supply to the Six, rival sources for tropical goods coming into the Common Market have included Latin America and non-Associate Africa, which supply several exports not produced by the Associates. For instance, wheat had to be imported from Argentina, citrus fruit from South Africa, Algeria and Brazil and meat from Latin America. Then, most of the cocoa requirements flowed in from Ghana, Nigeria and Brazil while only a small share of the sugar supply came in from the Associates. Similarly, products like groundnuts, palm oil, coffee and tin are in large and increasing supply from non-Associates. Many other products from the Eighteen face competition from temperate zone countries, for instance, sunflower seeds and oil from the USSR.

These limitations on trade are partly responsible for the apparently disappointing trade pattern between the EEC and the Associates. The table on the next page shows EEC's trade with associated territories, the rest of Africa and Latin America during the period, 1964-66.

The table shows that between 1964 and 1966 the relative quantity of the exports of Eighteen to the EEC remained almost static barely keeping pace with the overall rise in the Six's imports. France, Germany, the Netherlands and Italy, all import more from non-Associate Africa and from Latin America than from the EAMA;

(In million \$)

	1964	1965	1966	% change 1964-65	% change 1965-66
Imports into EEC:					
from Associates	1,150	1,146	1,319	-0.3	+15.0
from non- Associate Africa	2,981	3,195	3,518	+7.2	+10.1
from Latin America	2,436	2,586	2,692	+6.2	+4.1
Exports by EEC to Associates	821	828	847	+0.8	+2.3

only in the case of Belgium and Luxembourg is this situation reversed. Of exports from the Six to the Eighteen, less now comes from France and more from the other five EEC countries. France's share fell from 71 per cent in 1964 to 67 per cent in 1966, while Italy's rose from 4.7 per cent to 6.9 per cent and West Germany's from 9.5 per cent to 9.9 per cent in the same period. This increase, it has been noted, is due largely to "the progressive abandonment of quantitative restrictions" under the Yaounde Convention.

Twenty-six items together account for over 80 per cent of the Associates' exports to the EEC—\$1,015 million (88.3 per cent) in 1964; \$1,007 million (87.9 per cent) in 1965 and \$1,152 million (87.3 per cent) in 1966. These items are: tropical woods, coffee, bananas, shelled groundnuts, groundnut oil, palm nuts and kernels, cocoa beans, raw tobacco, raw natural rubber, raw sugar, copra, pepper and pimentoes, paddy rice and husked rice, essential oils, vanilla, oilcakes and cotton, and seven minerals—iron, manganese, tin and zinc ores, calcium phosphate, petroleum and copper.

Fifteen of these items increased their sales to the EEC between 1964 and 1966. These included timber, groundnuts, bananas, oilcakes, rubber and four small items (palm kernels oil, essential oils, pepper and pimentoes and vanilla) and all the mineral exports except tin ore. Copper and iron ore showed by far the biggest increases. Of the other 11 exports, coffee, cocoa and palm oil showed particularly sharp decreases. In the case of groundnuts and bananas, the increase is only slight and EEC imports from other sources—French imports of Nigerian groundnuts, Italian and German imports of Latin American bananas—have risen. The fluctuations in the trade of these commodities illustrate the problems of the Eighteen's exports which have led to so many complaints from the leaders of the Associates.

Taking commodity-wise, tropical timber figures at the top of vegetable product exports from the Associates to the EEC and accounts for 13.2 per cent of the Associates' total exports to the EEC. With a fall to \$163 million in 1965, exports of tropical timber have gradually increased from \$172.7 million in 1964 to \$174.2 million in 1966. Major part of these exports came from Ivory Coast, Gabon, Congo-Brazaville and Cameroon. In terms of volume, however, exports have slightly fallen from 2,502,000 tonnes in 1964 to 2,461,000 tonnes in 1966, although the decline in exports of timber from non-Associate Africa (mainly from Ghana and Nigeria) to the Six has been sharp.

Coffee occupies the second important place, but it suffered a great setback between 1964 and 1966, exports of Eighteen to the Six having slumped from \$162.7 million in 1964 to \$135.7 million in 1965. In 1966, however, the situation improved a little with a \$151.4 million increase in exports. One factor responsible for this downward trend in coffee sales was the fall in price although the quantity exported had also fallen from 207,300 tonnes to 193,700 tonnes. The Associates supplied only 25 per cent of coffee needs of the Six in 1966. In 1967, however, there were hopes of some improvement, particularly because of the International Coffee Organisation's selective adjustments of authorised exports, which could lead to increased African robusta exports to meet rises in demand for this variety.

Then come groundnuts, the exports of which have stepped up from \$67.55 million in 1964 to \$71.94 million in 1966 (recording a sharp fall in 1965), but the quantity exported increased proportionately more from 320,000 tonnes to 365,000 tonnes. France's guaranteed price fell from about 1,050 francs per metric tonne in 1964-65 to 970 francs in 1965-66. The effect is likely to sharpen further with France, in conformity with the EEC's agricultural policy, having ceased from January 1, 1968 to pay higher than world market prices. France alone accounts for 92 per cent of the EEC's total groundnut imports from the Associates. Of this, Senegal supplies 65 per cent and Niger 29 per cent, so these two countries are the most affected by the ending of France's guaranteed prices although the European Development Fund has promised to subsidise them if prices fall below the agreed "reference price"—in this case, about 930 francs per tonne. The EEC got less than half of its groundnut imports from the Associates in 1966; 51 per cent came from other parts of Africa, mainly Nigeria. Groundnut oil exports rose from 149,000 tonnes in 1964 to 151,000 tonnes in 1966, but their value fell (\$56.5 million to \$51.5 million) owing, here again, due to a fall in price. France is almost the only buyer of groundnut oil from the Associates and nearly all of it comes from Senegal.

About a third of the Six's groundnut oil comes from outside the Associates.

Similarly, palm kernel exports fell from 111,600 tonnes to 81,300 tonnes or from \$16.8 million to \$9.8 million in 1964-66. Although the main reason for this fall is the new palm oil crushing plant in Dahomey, which processed 32,500 tonnes of kernels in the first eight months of 1966; for this product, the EEC has also turned to sources other than the Eighteen—who provided 29 per cent of its supply in 1964 and 18 per cent two years later. More than half came from Nigeria in 1966 (191,000 tonnes). Palm kernel oil exports from the Eighteen to the Six are, however, expanding, having doubled in the three years under review, and reaching 27,400 tonnes in 1966. For this product, Italy is the chief importer, followed by Germany. The Dahomey crushing plant is the chief source of supply, followed by the Congo-Kinshasa.

Palm oil presents a different picture, for the fall in earnings over three years is less than the fall in quantity from 156,000 tonnes in 1964-65 to 102,000 tonnes in 1965-66. Most of the fall was due to temporary disturbances in the Congo, the chief supplier. Nigeria, however, increased her share of palm oil exports to the Six, but they formed only 15 per cent of the total in 1966. During the current year, these exports will certainly come down owing to the prolonged civil war in the country.

Cocoa trade between the Six and the Eighteen has fluctuated in the same way as world cocoa trade; exports were up from 149,000 tonnes in 1964 to 185,000 tonnes in 1965, but their value fell from \$77.6 million to \$76.1 million; in 1966, Associates exported 158,700 tonnes for \$70.2 million. More than half of this cocoa came from the Ivory Coast, most of the rest from Cameroon. The drop in imports was most noticeable in Germany and Holland, the second and third largest cocoa importers in the world, both of which reduced imports from all sources in 1966. Only 41 per cent of the EEC's cocoa supply comes from the Associates, the major exporters being outside the Eighteen.

In respect of bananas, Somalia, Cameroon and Ivory Coast are the countries mainly concerned. The banana exports to the EEC are affected by the taste of Italians and West Germans, who prefer Latin American bananas. It is because of this that even after an enormous increase in sales to the Six in 1964-65—from 251,500 tonnes to 370,200 tonnes—the Associates' banana exports fell to 289,200 tonnes in 1966 although the price level was much the same in 1966, when the value of exports was \$56.277 million, as in 1964 when their sales amounted to \$50.7 million.

The share of the Eighteen has also fallen in the case of oil-cakes exports although their sales have steadily risen from 202,000 tonnes to 215,500 tonnes (\$17.7 million to \$20.5 million).

Other vegetable products are of relatively small importance as far as EEC's trade with the Associates is concerned. The EEC buys only 6 per cent each of its rubber and cotton from the Associates. Rubber is not a major export of any Associate. Cotton, however, is Chad's leading export, accounting for 40 per cent of the EEC's cotton imports from the Eighteen, which have steadily fallen. Madagascar alone exports sugar and France is the only importer. But even these exports have fallen by 70 per cent in 1964-66. Madagascar is the only Associate exporter of rice and France the only EEC importer. Nearly all Associate exports of pepper, pimientos, vanilla and essential oils, and most of their tobacco exports are from Madagascar; these are traded in very small quantities, while trade in copra (all sold by Togo and Dahomey to France) is small and dwindling.

The mineral exports of Eighteen rose by nearly 50 per cent in 1964-66, but most of the increase was in iron. Almost all this amount, which by 1966 accounted for 10 per cent of all the EEC's iron imports, came from Mauritania, where iron mining began in 1963. However, other African States' share in the EEC's iron ore imports is much greater than the Associates'; 29 per cent in 1966 although it is rising slowly. About a quarter of the EEC's total imports from the Associates in 1966 consisted of copper (\$313.9 million), all of it coming from the Congo-Kinshasa. Belgium and Luxemburg bought 69 per cent of the 1966 total of 292,500 tonnes. Only about a quarter of the Community's total demand, however, is met by the Congo; roughly another quarter comes from other African countries. Oil exports from the Associates to the EEC fell from 1,145,000 tonnes in 1965 to 901,600 tonnes in 1966. France was almost the sole importer in 1964 and 1965, but after that more was sold among the Associates themselves or to West Indian countries like Trinidad. The Associates' oil only provides 1 per cent of the EEC's total requirements.

Exports of manganese ore have fallen slightly, from 515,000 tonnes to 509,000 tonnes in 1964-66, but their value has risen from \$15.5 million to \$17.6 million. More than half of the Associates' manganese goes to Germany.

All told, over a quarter of the Six's supply comes from the Associates, but much more from other parts of Africa. The Six are now buying less tin ore than before, but the Eighteen's share has increased considerably, and is now about a quarter. Between 1964 and 1966, sales were down from 7,375 tonnes (\$17 million)

to 7,215 tonnes (\$16.9 million). Zinc ore exports from the Associates to the Community rose in this period from 86,000 tonnes (\$5.8 million) to 99,000 tonnes (\$6.1 million). Nearly all the zinc comes from Congo-Kinshasa. Calcium phosphates have risen fast, 747,000 tonnes having been sold to the Six in 1964 for \$20.9 million. France more than doubled her imports during this period. But even then about half of the EEC's phosphates needs are met from other African countries.

The above analysis of trade between the Eighteen and the Six evidently suggests that the fruits of trade have not been as satisfactory as were expected. What are the possible reasons? Firstly, the fall in prices of some of the commodities brought in less revenues to the Associates from the EEC. Secondly, the emphasis throughout seems to be on bringing about economic development of the Associates through aid rather than through trade which is apparently more with non-Associated Africa and Latin America. And lastly, there has been greater protection to agricultural products of the EEC countries themselves than to the products emanating from the Associates. This situation boils down to three problems. The first is that of increasing trade between the Eighteen and the Six; the second is that of guaranteed minimum prices for some of the export items of the Associates; and the third is that of enlarged quotas for addition to tariff preferences. How can this be achieved? Mr. Armengaud, a French senator, has thrown valuable hints as to the ways in which these problems can be solved. (These suggestions might form the basis of the forthcoming negotiations).

Mr. Armengaud's brief is limited to finding practical ways of improving markets for the Associates' exports at stable and remunerative prices in the European Common Market. Pinpointing that the Six, the US and other major industrialised States, "subsidise our own farmers", the report declares that a minimum definition of "remunerative" should be one which allows the income of tropical produce exporting countries sufficient expansion (from exports and aid including loans and commercial credits) to assure both balance of payments stability and a reasonable overall growth in the national economy. Armengaud's recommendations include the following general rules:

- (a) "Tariff preferences for the Associates being one of the fundamental bases of the Convention, tariff quotas at reduced rates of duty or nil duty, which have been accorded to several EEC members for purchases outside the EEC, should be reduced each time that they harm the interests of the Associates." This, the report says, should ensure that the Associates "truly benefit from Community prefer-

ences whether from the common external tariff or from those worked out within the context of the common agricultural policy”.

- (b) In cases where the common external tariff does not represent a preference (either because certain products are duty-free from all sources or because duty is exceptionally small), “appropriate mechanisms should be looked for, product by product, according to the circumstances, which would assure the Associates guarantees of a minimum price and sales of given quantities within limits which both take account of the potential of the Associates as well as the traditional import sources of the EEC member States”.
- (c) “Aid to production, which is currently disbursed by the European Development Fund, should be transformed into a new autonomous financing body: the Stabilisation Fund for associated Tropical Produce which should be administered by the EEC Commission, along lines laid down by the Council of Association”.

These are clearly controversial recommendations, particularly in the context of the recent UNCTAD conference in New Delhi, where an attempt was made to diminish the preferences accorded by the EEC to its Associates to be replaced by a generalised system of preferences. But the Algiers Charter had clearly stated that no system of preferences would be acceptable to these Associated countries if they cut across their interests or if suitable compensation was not paid to them in lieu of such losses. But the fight for generalised preferential system continues unabated, the Associates’ hopes notwithstanding.

CONCLUSION

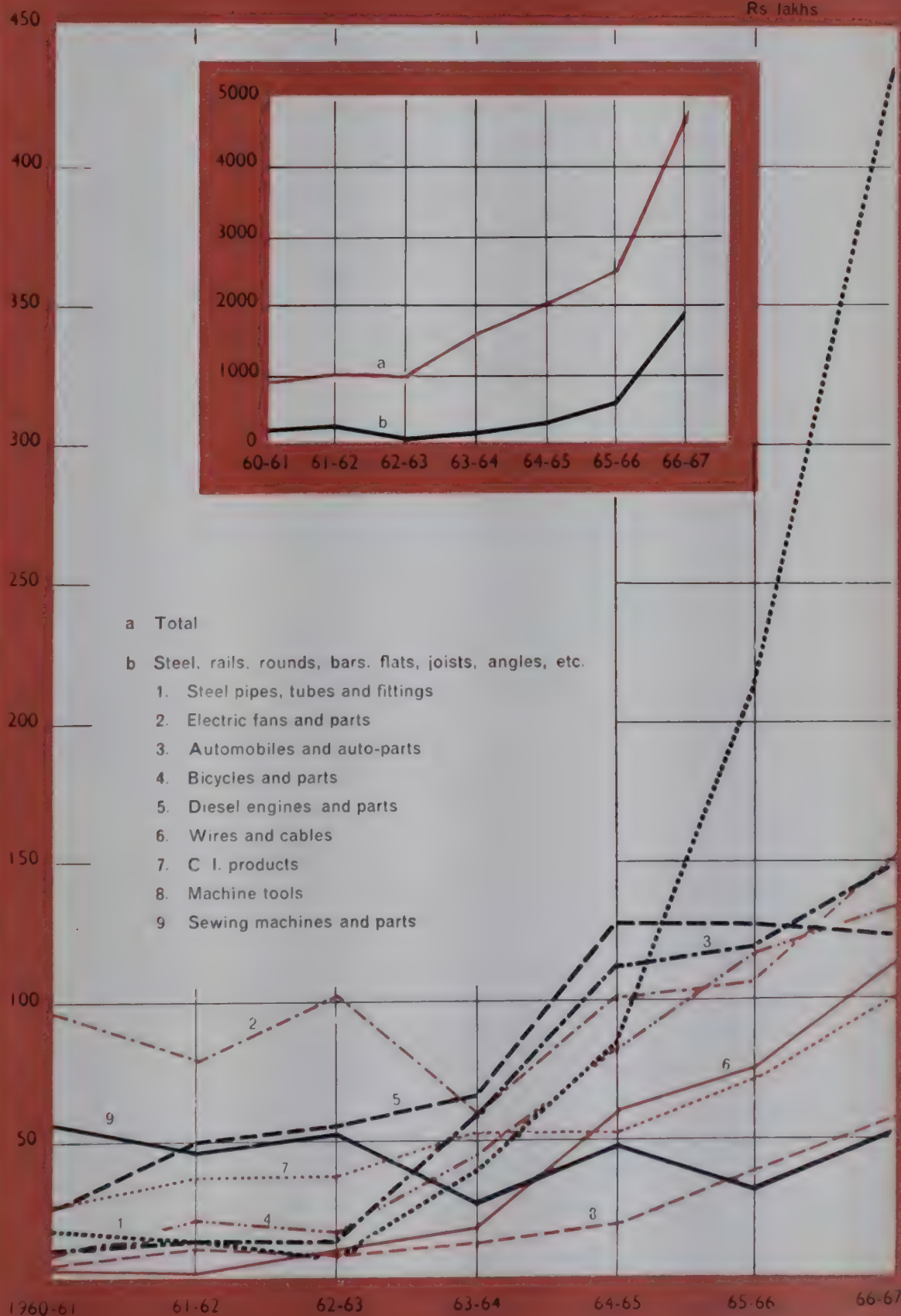
In conclusion, one can say, that so far the trends in trade between the Associates and the EEC have not been wholly favourable, but that attempts are consistently being made, at France’s behest mainly, to make them so. It is only to be expected that the coming negotiations will focus attention on the grievances of the Associates and provide them opportunities of trade that will be more profitable than they hitherto had. This is all the more so because if no one in the EEC, then France at least, is interested in maintaining not only her dominant position in her ex-territories in Africa but also in other African States, from the Commonwealth mainly, who are now interested in joining the EEC.

But if more and more Commonwealth countries enter the ECM, there is a likelihood that countries like India, whose exports to the EEC have grown considerably during the last few years, will be hit adversely. This will be a matter for concern, if the current negotiations between East African countries and the EEC mature into an agreement of association. Perhaps then the only hope will be left in a generalised system of trade preferences, as envisaged by UNCTAD-II held in New Delhi.

INDIA'S FOREIGN TRADE INDICATORS

EXPORTS OF INDIAN ENGINEERING GOODS

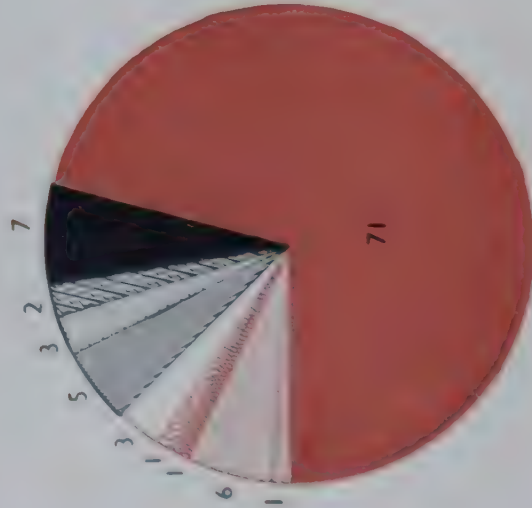
Rs lakhs



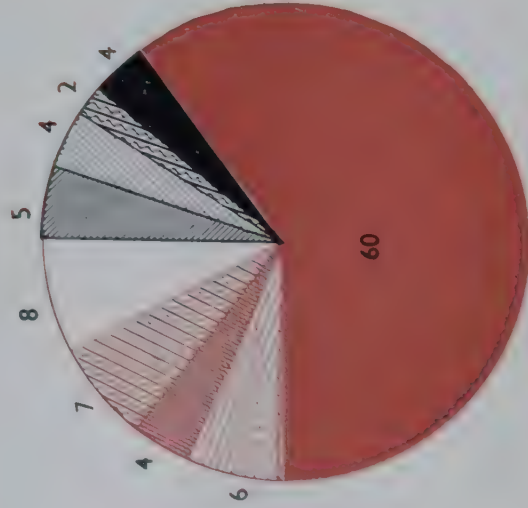
DIRECTION OF EXPORTS OF INDIAN ENGINEERING GOODS

(% Share of Total value)

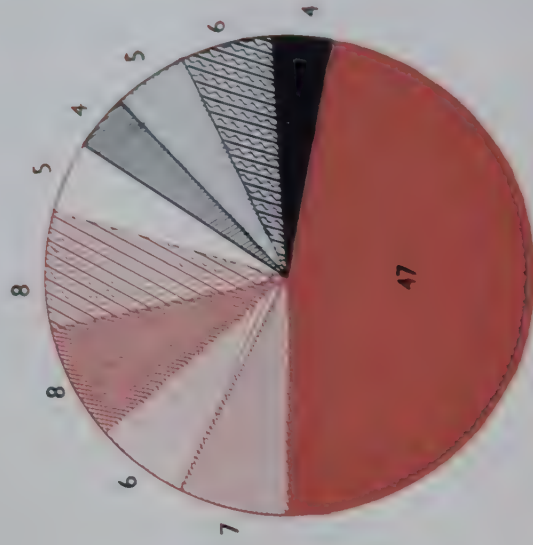
1960-61



1965-66



1966-67



OTHER COUNTRIES

CHARACTERISTICS OF FOREIGN TRADE OF TURKEY AND PROSPECTS OF INDO-TURKISH TRADE

By A.K. Chakraverti

THE present paper aims to highlight the pattern of foreign trade of Turkey and to point out areas where possibilities of promotion of trade between India and Turkey exist. Though Turkey is a country which is in its initial stage of development, the economy reveals certain characteristics of foreign trade which dimensionally assume proportions that are different from those of other developing economies. The years, 1961 to 1965, have been covered in this paper to reveal the recent movements in the Turkish foreign trade.

INTRODUCTION

Any study of the pattern of foreign trade of a country is closely linked up with the internal production structure of the economy. In other words, the commodity exports of a country are largely determined by products, which either fetch an attractive price from buying countries abroad and/or are in excess supply. On the other hand, the commodities imported are determined by products for which pressing internal demands exist and/or are in short supply.

In Turkey, exports like raw cotton and raw tobacco fetch good prices in the foreign market as compared to production costs. These are in excess supply and have good foreign markets. The case of sugar is somewhat different. Sugar is in excess supply, but the high production cost of sugar from beet discourages foreign buyers to offer a reasonably good price to Turkish sugar. Accordingly, sugar exports are normally subsidised.

Commodity imports of Turkey fall in both the categories of competitive or substitutable and non-competitive or non-substitutable imports. The substitutable commodities like wheat and other cereals are imported only when these are in short supply. On the other hand, imports of machinery and transportation equipments of Turkey are non-competitive and are imported mainly because considerable internal demands exist. With rapid industrialisation, the need for capital to build up capacities in the key sectors of the economy is vitally linked up with the non-competitive capital imports of the country.

A word of caution, however, may not be out of place. The strict compartmentalisation between competitive and non-competitive imports has certain limitations. Some of the commodities imported, which are non-competitive now, may as well be substituted in a few years to come, with a determined effort to produce the same in future.

In the following paragraphs, an analysis has been made of the production structure of the Turkish economy, the composition of exports and imports of Turkey, the balance of payments situation and the barter terms of trade of Turkey.

COMPOSITION OF DOMESTIC PRODUCT

In Table I below, the distribution of domestic product by industrial origin (in percentages) has been presented for the years 1960, 1961 and 1963. For the years 1960 and 1961, the OECD

TABLE I
DOMESTIC PRODUCT AT FACTOR COST BY
INDUSTRIAL ORIGIN

<i>Sectors/Industries</i>	<i>Percentage distribution</i>		<i>Gross domestic product at factor cost</i>
	<i>Net domestic product at factor cost</i>		<i>product at factor cost</i>
	<i>1960</i>	<i>1961</i>	<i>1963</i>
(1)	(2)	(3)	(4)
1. Agriculture, forestry, fishing and animal husbandry	43	41	39
2. Mining, quarrying, manufacturing industries and electricity	17	17	16
3. Construction	5	5	5
4. Transport and communications	7	7	7
5. Wholesale and retail trade	9	9	11
6. Ownership of dwellings	3	4	5
7. Banking, insurance, public services and other services	16	17	17
TOTAL	100	100	100

publication, *Statistics of National Accounts*¹, gives details of net domestic product at factor cost. The 1963 figures have been compiled from the recently published "Inter-industry Transactions Table for Turkey"² and relate to percentage distribution of gross domestic product at factor cost by industrial origin. Although 1963 figures are "gross" of depreciation, it may be observed that the distribution of domestic product is not appreciably different from 1960 and 1961.

It is clear from Table I that the major part of the contribution to the domestic product comes from agriculture and ancillary activities like forestry, fishery and animal husbandry. Though the trend indicates a share which is gradually diminishing, the percentage contribution is around 41 on the average. The contribution by manufacturing industries (including electricity) along with mining and quarrying is around 17 per cent. All the services including banking, insurance, professions, personal services and public services, but excluding trade, transportation and communications account for about another 17 per cent.

PATTERN OF EXPORTS (F.O.B.)

With agricultural outputs predominating in the economy's aggregate domestic product, one would naturally expect that Turkey's exports would mostly comprise primary products. Table II on next page gives a detailed commodity breakdown of Turkey's exports from 1961 to 1965. The figures presented are in the form of percentages to aggregate value of exports at f.o.b. prices.

The percentage share of exports of a particular commodity-group to the total exports for the year, unlike absolute values, displays the change in the composition of the basket of goods exported. It may be noted that these figures represent only commodity exports. The 1963 Inter-industry Transactions Table³ reveals that for 1963 the exports of invisibles (namely, revenues earned from abroad on account of tourism, travel, freight, port facilities, insurance and export of public services and private professional services) amounted to 644 million Turkish Liras (TL), thus bringing the value of exports

¹Organisation for Economic Cooperation and Development (OECD): *Statistics of National Accounts*, April 1964, p. 54.

²Chakraverti, A.K., Cinar Cemil and Canalp Guler: *Structural Interdependence of the Turkish Economy: 1963*, State Planning Organisation, Prime Ministry, Republic of Turkey, May 1967, (mimeographed).

³Vide *Structural Interdependence of the Turkish Economy: 1963*, Chakraverti, A.K., Cinar Cemil and Canalp Guler; Chapter 8, (mimeographed).

TABLE II

PATTERN OF COMMODITY EXPORTS OF TURKEY (1961 to 1965)

<i>Commodity-groups</i>	<i>Percentage distribution of exports of commodities</i>				
	1961	1962	1963	1964	1965
(1)	(2)	(3)	(4)	(5)	(6)
1. Live animals (sheep, goat, etc.)	4	5	4	3	4
2. Fresh fish	1	1	1	1	1
3. Barley & other cereals	2	—	1	1	1
4. Fresh fruits & nuts	14	18	17	15	16
5. Dried fruits (figs & raisins)	7	6	6	6	6
6. Vegetables	2	1	1	1	1
7. Bran, oil-seeds, cakes, etc.	3	4	4	4	4
8. Sugar (including molasses)	5	2	3	5	2
9. Other food (n.e.c.)	1	1	1	1	1
10. Tobacco raw (unprocessed)	25	25	18	22	20
11. Oil-seeds, nuts, etc.	1	—	—	1	1
12. Goat, sheep, lamb-skins	2	1	2	2	1
13. Wool and animal hair	5	3	5	3	3
14. Raw cotton	16	16	21	21	21
15. Seeds and other vegetable materials	2	1	1	1	2
16. Animal bladders, guts, stomach	—	1	1	1	1
17. Iron ore and crude minerals	1	1	1	1	1
18. Non-ferrous ores (chromium, etc.)	4	3	2	2	2
19. Fuel oils & lubricants	—	2	2	2	1
20. Vegetable oils & fats (olive oil, etc.)	—	4	3	1	3
21. Chemicals (tanning extracts)	—	—	1	1	1
22. Textile yarns & fabrics	1	1	1	1	1
23. Iron & steel blooms, billets, slabs	1	—	—	—	—
24. Blister copper & alloys	1	2	2	2	4
25. Unclassified	2	2	2	2	2
TOTAL	100	100	100	100	100

of commodities and services to an aggregate of 3,957 million Turkish Liras. In other words, for 1963 exports of invisibles account for about 16 per cent of aggregate exports.

The striking feature revealed by Table II lies in the share of primary products in the country's commodity exports. From 1961 to 1965, this share ranged from 82 to 84 per cent. Among primary products again, three groups of commodities are predominant, namely, (i) fresh and dried fruits, (ii) raw tobacco, and (iii) raw cotton. Fresh and dried fruits account for 21 to 24 per cent of commodity exports, while vegetables add another 1 to 2 per cent. Shares of raw tobacco in exports vary from 18 to 25 per cent. Raw cotton accounts for 16 to 21 per cent of commodity exports. Share of ores and crude minerals ranges from 3 to 5 per cent. Exports of sugar fluctuated from 2 to 5 per cent depending on surplus available for exports and the price it fetched in the external market. The case of sugar exports in the Turkish economy provides an interesting example. Production costs being normally higher than prices of sugar exports, subsidies are allowed to promote exports of sugar.⁴

The basic data of commodity-exports are compiled from *Year-Book of International Trade Statistics*.⁵

PATTERN OF IMPORTS (C.I.F.)

With its developing industries, the demand for capital goods has been continuously rising. With inadequate internal supply, the impact of this demand is entirely on the foreign market.

In Table III on next page are presented the commodity structures of imports from 1961 to 1965. The basic data have been compiled from the United Nations *Year-Book of International Trade Statistics*.⁵ The figures presented in Table III are, however, percentages of c.i.f. values of commodities imported to the total value of commodity imports. In the aggregate values, the invisible imports are not included and the figures pertain to only commodity imports with the exception of military goods and imports under the US-Turkish aid programmes. For 1963, invisible imports (namely, payments for tourism, travel, freight, port facilities, insurance, Government services and other services, etc., made abroad) come to 637 million Turkish Liras.⁶ Taking invisibles, the aggregate

⁴Vide Chapter 5, Section 7 of *Structural Interdependence of the Turkish Economy*, as in ².

⁵United Nations: *Year-Book of International Trade Statistics*, 1964 and 1965.

⁶Vide Chapter 6 on "Imports" of the *Structural Interdependence of the Turkish Economy*, as in ².

TABLE III
PATTERN OF IMPORTS OF COMMODITIES* (1961 to 1965)

<i>Commodities</i>	<i>Percentage distribution</i>				
	1961	1962	1963	1964	1965
(1)	(2)	(3)	(4)	(5)	(6)
1. Wheat and muslin	12	8	8	1	4
2. Coffee, tea, cocoa & spices	2	1	1	—	—
3. Hides of cattle	1	—	1	—	—
4. Crude rubber	1	1	1	1	2
5. Mine timber and other wood	1	—	—	—	1
6. Wool and artificial fibres	3	4	4	4	4
7. Crude petroleum	—	5	8	11	8
8. Petroleum & products	10	7	2	2	2
9. Chemicals, etc.	9	10	9	11	16
10. Vegetable & animal oils and fats	—	3	4	5	1
11. Rubber tyres & tubes	3	4	3	1	1
12. Paper & paper products	2	1	2	1	2
13. Textile yarns & products	2	2	2	3	3
14. Non-metallic mineral products	2	2	1	1	1
15. Iron & steel products	7	6	7	8	9
16. Non-ferrous metals	1	2	1	2	2
17. Metal products	2	3	3	3	2
18. Machinery & transportation equipments	38	38	39	42	37
19. Miscellaneous manufactures	3	2	2	3	3
20. Unclassified	1	1	2	1	2
TOTAL	100	100	100	100	100

*The commodity imports do not, however, include military goods and imports under the US-Turkish aid programmes.

value of imports comes to 6,853 million Turkish Liras. In other words, invisibles account for about 9 per cent of aggregate c.i.f. value of imports of commodities and services for 1963. The aggregate value of 6,853 million Turkish Liras for 1963, however, does not include 298 million Turkish Liras of interest payments and profit transfers,

The most revealing feature of Table III is the share of machinery and transportation equipments in commodity imports of Turkey. This share is 39 per cent on the average for the years 1961 to 1965, ranging from 37 per cent in 1965 to 42 per cent in 1964. The next important group is chemicals, accounting for about 10 per cent of the total on the average. Share of crude petroleum varies from 5 to 11 per cent, whereas share of petroleum products has dropped from 10 per cent in 1961 to as low as 2 per cent in 1963, remaining invariant thereafter till 1965. Cereal imports like wheat and muslin are somewhat erratic and entirely depend on outturn of domestic crops.

Ferrous and non-ferrous metals continued to have a more or less stable share (8 to 11 per cent) of all commodity imports during the period, 1961 to 1965. Metal products accounted for another 2 to 3 per cent. With increasing internal production of rubber tyres and tubes, the imports of these products fell from 4 per cent in 1962 to 1 per cent in 1965.

BALANCE OF PAYMENTS

Current values of imports (c.i.f.) and exports (f.o.b.) for Turkey show considerable fluctuations over the period, 1961 to 1965. The chief reason for taking 1961 as the starting-point lies in the fact that in September 1960 the Turkish Lira (TL) was revalued at 9 TL per US dollar. Earlier, the rate of exchange was about 2.8 TL per US dollar. To ensure comparability over years, the period beginning with 1961 has been chosen for analysis.

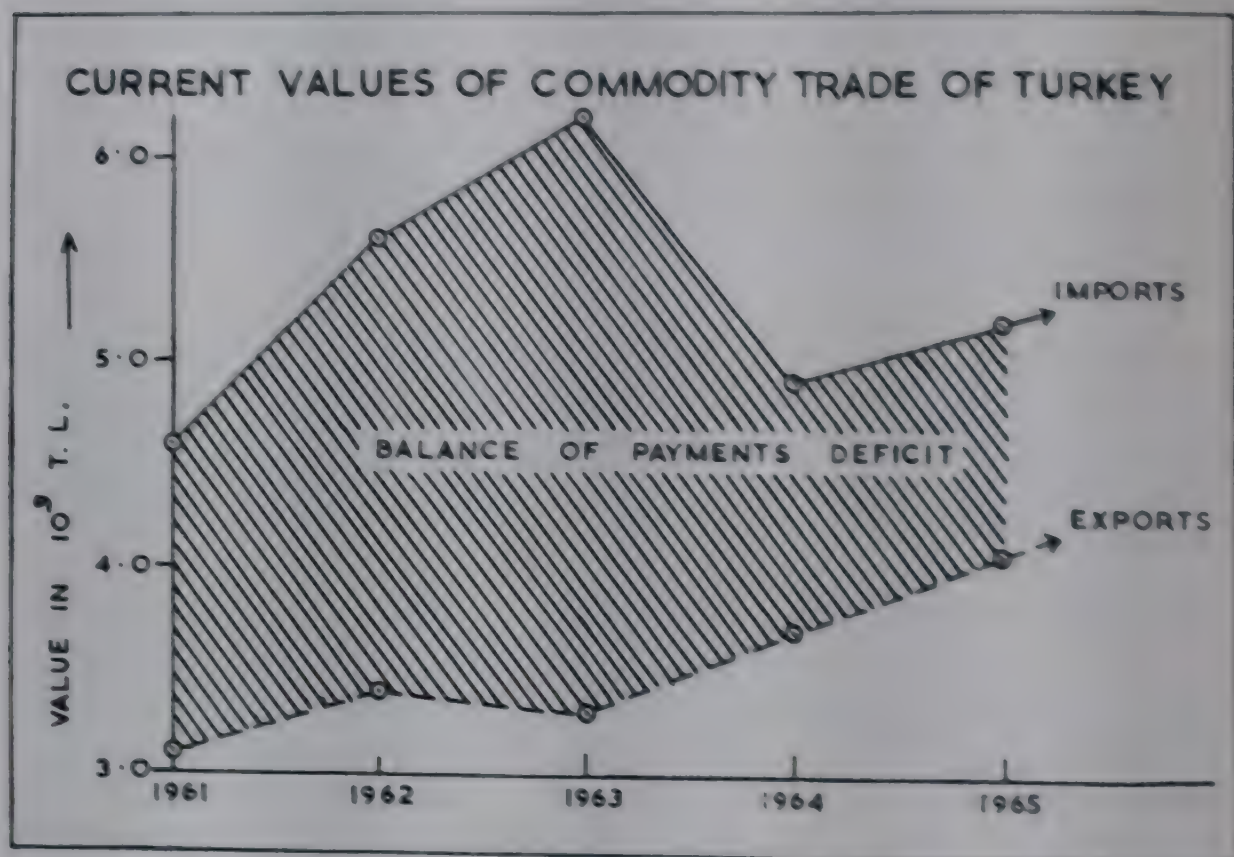
In Table IV, the values of imports and exports at current prices for 1961-65 have been presented. The values pertain to

TABLE IV
MERCHANDISE TRADE OF TURKEY (1961 to 1965)
AND BALANCE OF PAYMENTS*

Year	<i>Current values of commodity trade* (Million Turkish Liras)</i>		
	<i>Imports</i>	<i>Exports</i>	<i>Balance of payments</i>
(1)	(2)	(3)	(4)
1961	4,585	3,121	— 1,464
1962	5,600	3,431	— 2,169
1963	6,216	3,313	— 2,903
1964	4,878	3,697	— 1,181
1965	5,193	4,130	— 1,063

*Military goods and imports under the US-Turkish aid programmes are excluded.

merchandise trade only with some exceptions as mentioned below. The source of information is the United Nations *Year-Book of International Trade Statistics*.¹



The balance of payments in respect of merchandise trade continued to deteriorate till 1963. The main reason lies in the fact that during the period, 1961 to 1963, commodity exports recorded a rise of only 6 per cent, while imports shot up by as much as 26 per cent in value terms.

From 1963 to 1965, the fluctuation was entirely in the opposite direction and the balance of payments position improved remarkably and attained a level through 1964 and 1965, which was better than even that of 1961. It is easy to see that this phenomenon is explained by a steep fall of about 17 per cent in commodity imports, while exports recorded a rise of about 25 per cent.

PRICES OF EXPORTS AND IMPORTS

Tables II and III reveal that the commodity composition of exports and imports changed considerably from 1961 to 1965. The current values of exports and imports, therefore, do not reflect the real situation.

¹United Nations: *Year-Book of International Trade Statistics*, 1965, p. 773.

An adjustment in respect of prices, consequently, is called for to facilitate and complete a thorough analysis of barter terms of trade of Turkey over this period. In order to do this, we have computed prices of commodity exports and imports from the quantity (in thousand metric tons) and value (in million Turkish Liras) published in the United Nations *Year-Book of International Trade Statistics*. These prices are later converted to a series with 1961 as base. The price-indices (with 1961=100) so computed are presented in Table V below.

TABLE V

PRICE INDICES OF EXPORTS AND IMPORTS (1961 to 1965)

Year	Price indices (1961=100)	
	Imports	Exports
1961	100	100
1962	80	95
1963	83	101
1964	74	93
1965	76	105

It is interesting to observe that over the period, 1961 to 1965, the level of export prices was highest in 1965, whereas that of import prices was maximum in 1961. From 1961 to 1965 both import and export prices followed each other and recorded fall and rise alternatively relative to the level of 1961.

The fluctuations in import prices are, however, much more predominant as compared to export prices. The most striking fluctuation was the drop of the import price index between 1961 and 1962 by 20 per cent. A closer examination of quantities and values of imported commodities in 1961 and 1962 reveals that although the value of imports of chemicals, including medicines, pharmaceuticals, dyes and paints; iron and steel products; and machinery and transport equipments, were higher in 1962 than in 1961, the prices at which these important and major commodities were imported in 1962 were consistently lower than those in 1961. This mainly explains the sudden drop of the import price index from 1961 to 1962.

REAL VALUES OF EXPORTS AND IMPORTS

As already observed, the prices of exports and imports did fluctuate considerably and accordingly it is necessary to correct

the current values of imports and exports for these price fluctuations. The current values of exports and imports presented in Table IV are corrected by using respective price-indices given in Table V. The corrected values of exports and imports are presented in Table VI below. Looked at from a different angle, these corrected values represent values of exports and imports at constant prices of 1961.

TABLE VI
CORRECTED VALUES OF MERCHANDISE EXPORTS AND
IMPORTS (1961 to 1965) (at 1961 constant prices)

(In million Turkish Liras)

<i>Year</i>	<i>Corrected values (at 1961 prices)</i>		
	<i>Imports</i>	<i>Exports</i>	<i>Balance of payments</i>
1961	4,585	3,121	—1,464
1962	7,000	3,612	—3,388
1963	7,489	3,280	—4,209
1964	6,592	3,975	—2,617
1965	6,833	3,933	—2,900

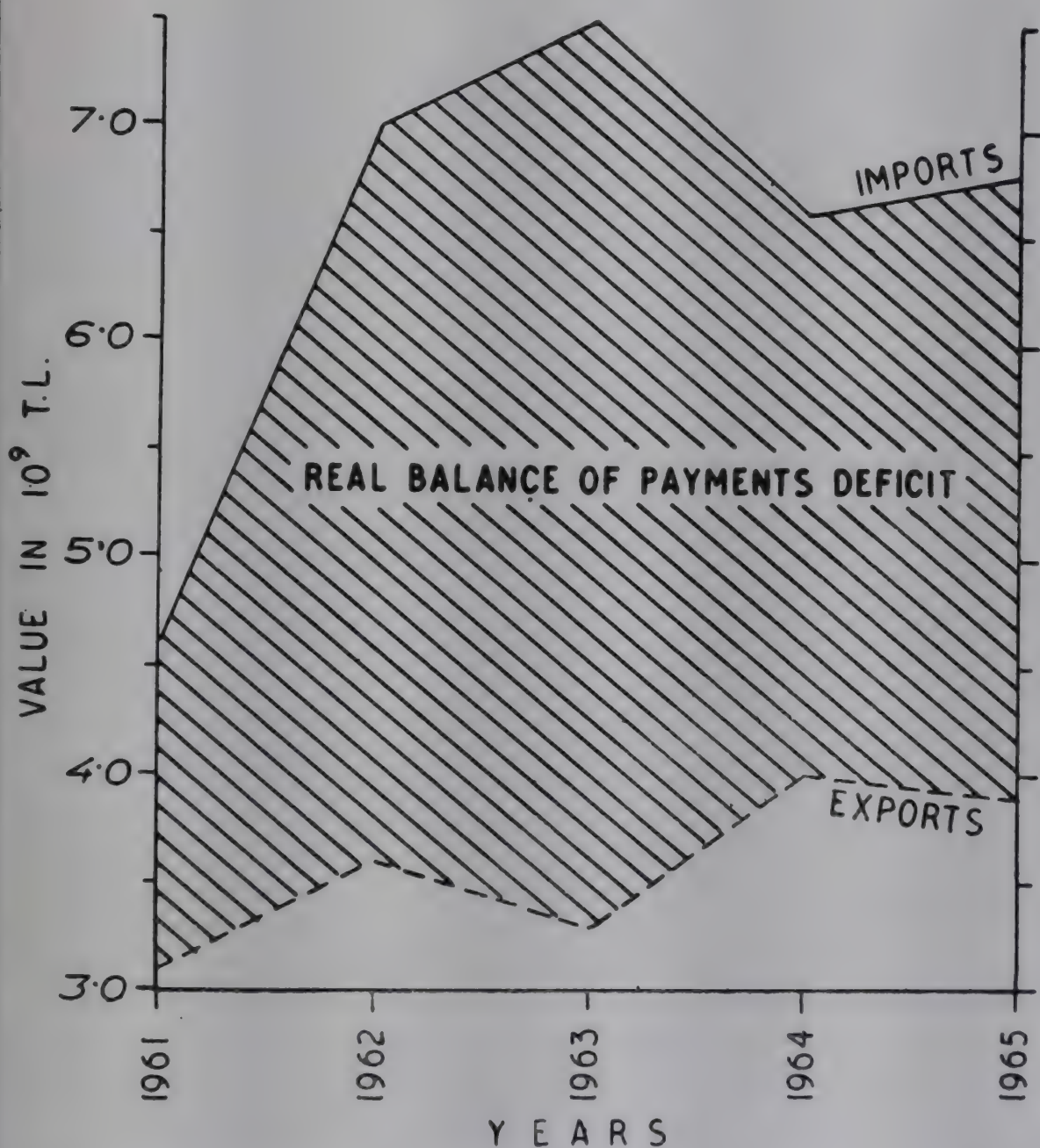
The constant values of exports and imports enable one to get an idea of the balance of payments situation in real terms. It is worth noting that though the current values indicate that 1965 situation was best in respect of the balance of payments, the real values reveal that the 1961 level was the best over the period. Both in terms of current values and constant values, however, one finds that the 1963 situation was the most unfavourable. The graph on next page clearly portrays the situation over the period, 1961 to 1965.

BARTER TERMS OF TRADE

We have already pointed out that the analysis presented above takes into account only the merchandise or commodity exports and imports with the exception, however, of military goods and imports under the US-Turkish aid programmes. These figures, therefore, are suitable for an analysis of barter terms of trade of Turkey.

Barter terms of trade represent the quantum of exports per unit quantity of imports and are best estimated for merchandise

CONSTANT VALUES OF COMMODITY TRADE OF TURKEY.



trade only. To get a clearer idea of barter terms of trade, let us assume that

E = current value of exports (f.o.b.),

I = current value of imports (c.i.f.),

P_e = Prices of exports, and

P_i = Prices of imports.

The physical volume of exports is apparently given by E/P_e , while physical quantum of imports comes to I/P_i . If we denote "barter terms of trade" by B , we get

$$B = \frac{E/P_e}{I/P_i} = \frac{E}{I} \cdot \frac{P_i}{P_e}$$

It is worth noting that B is not a pure ratio free from dimensions. Since the commodities exported and the commodities imported are not always similar, the units in which exports are measured are very often different from the units in which the imports are reckoned. For example, if a country exports only bales of cotton and imports only litres of petroleum, the barter terms of trade (B) will have the following dimension:

(bales of cotton)/(litres of petroleum)

Expressed in percentage, B will indicate the number of bales of cotton exported to get one hundred litres of petroleum in exchange.

From what has been stated above, it is pretty clear that barter terms of trade display quite another aspect of foreign trade of a country. It is also easily seen that the constant value series of exports and imports are most suitable for computation of B . In Table VII below, the constant values of exports and imports (as presented in Table VI on p. 186) are represented as indices with 1961 as base.

TABLE VII
CONSTANT VALUES OF IMPORTS AND EXPORTS
OF TURKEY (1961 to 1965)

(1961=100)

Year	Constant values (with 1961=100)		Barter terms of trade ($B=e/i$)
	Imports (i)	Exports (e)	
1961	100	100	100
1962	153	116	76
1963	163	105	64
1964	144	127	88
1965	149	126	85

The "barter terms of trade" have been computed in the last column of Table VII and refer to 1961 as base. In other words,

the B measures represent quantity of exports needed to import one physical unit, when the balance of payments level is held constant at 1961 prices.

A closer look at results presented above brings out a few very interesting points. Beginning in 1961, barter terms of trade of Turkey continued to improve, till in 1963 these showed a remarkable improvement of 36 per cent over 1961. Later the situation deteriorated again, but the levels in 1964 and 1965 were still considerably better than those in 1961. It is worth noting that though 1963 was the worst year in respect of balance of payments (both for current and constant values), the exports of commodities per unit of imports, in physical terms, were the lowest in 1963 during the period, 1961 to 1965.

INDO-TURKISH TRADE POSSIBILITIES

Trade between Turkey and India, at present, is negligible. Indo-Turkish trade relations can be definitely revived to the mutual benefit of the two countries. In the following paragraphs, a careful study has been made in order to indicate areas where possibilities of promotion of Indo-Turkish trade exist.

To start with, figures of Turkey's trade with India for the period, 1961-65, have been compiled from the United Nations *Year-Book of International Trade Statistics* (1965). Turkey's imports from India and exports to India are presented in Table VIII below.

TABLE VIII
TURKEY'S TRADE WITH INDIA (1961 to 1965)

Year	Value in millions of Turkish Liras		
	Imports from India	Exports to India	Balance in favour of India
1961	48.44	0.26	48.18
1962	43.98	0.01	43.97
1963	38.38	0.00	38.38
1964	7.69	0.62	7.07
1965	5.38	0.92	4.46

Turkey's imports from India from 1961 to 1963 had been mainly jute goods and tea. The reason for a sudden drop in India's

exports to Turkey from 1964 onwards is that Turkey under an agreement with Pakistan began to buy jute goods from Pakistan instead of from India. Possibilities of reviving exports of jute goods to Turkey, however, exist, because India may offer these at comparatively cheaper rates.

In general, Table VIII reveals that trade between India and Turkey in the past had been entirely one-sided. The structures of both these economies do not offer scope for exchange of goods, unless special efforts are made to introduce new items.

Among the other difficulties that come in the way are Turkey's recurring balance of payments deficit and India's negligible imports from Turkey. Turkey's foreign exchange earnings from aid are so constrained as to favour trade, almost on bilateral basis, with the USA, the UK and West Germany. On the other hand, our imports from Turkey had been completely negligible mainly because the exportable goods offered by Turkey, except for a few commodities, are not in demand in India.

Both being developing economies, very little scope exists in interchange of commodities in the foreign market. A closer look, however, helps one to make a better assessment of the new avenues that are opening up recently in promoting Indo-Turkish trade.

The most important area, in which India can make an impact on the Turkish market, covers commodities like metal products, engineering goods and hand implements. Already Hindustan Steel has executed a contract to supply 16,000 tonnes of steel rails to the Turkish State Railways. A further supply of about 19,000 tonnes of steel rails is almost in the final stages. Indian firms are also making efforts to supply railway track materials, fish plates, rail clamps, ribbed sole plates, etc., to the Turkish Railways. Under the quota for Izmir International Fair, India is also exporting air compressors, bicycle parts, rock drills, pneumatic hand tools and various other kinds of hand apparatus. It is encouraging to note that prices of Indian metal products and hand tools can very easily compete with those of West European countries. With Turkey's expanding industrial base, these commodities will be largely demanded in future.⁸

Goods that India could profitably import from Turkey are more difficult to lay down. In the past, India's imports from Turkey had been negligible and it is easy to see the reason behind

⁸The author is grateful to Shri B.P. Sarkar, First Secretary (Commerce), Embassy of India, Ankara, for making available to him necessary information on recent trends in Indo-Turkish Trade.

Turkey pressing India to buy commodities from her as a first step to improve trade relations. Of late, attempts are being made to identify commodities which Turkey could supply to India and during 1967 India imported 400 flasks of mercury from Turkey at a value of \$195,000. Efforts are also being made to purchase special cotton from Turkey, as also a few minerals and non-ferrous metals like copper.

Exchange of technical know-how and educational programmes are also likely to prove useful in improving trade relations. Possibilities of Indians participating in building up of power-transmission lines and towers in Turkey are already very bright. On the other hand, educating Turkish personnel in India and opening up possibilities of mutual exchange of engineering personnel are also worth experimenting.⁹

SUMMARY

The results of the above analysis can be summarised as below:

- (a) Domestic product of Turkey is predominated by contribution from primary-production sector, namely, agriculture and ancillary activities.
- (b) Major exports of Turkey are primary products like fresh and dried fruits, raw cotton and raw tobacco.
- (c) Major imports of Turkey are capital goods like machinery and transportation equipments.
- (d) Prices of exports, over the period 1961 to 1965, were the highest in 1965 and the lowest in 1964.
- (e) Prices of imports, over the period 1961 to 1965, were maximum in 1961 and minimum in 1964.
- (f) Balance of payments, over the period, was best in 1965 and worst in 1963.
- (g) Balance of payments, at constant prices of 1961 during 1961 to 1965, was most favourable in 1961 and most unfavourable in 1963.
- (h) Barter terms of trade, over the period 1961 to 1965, were most favourable in 1963 and most unfavourable in 1961.
- (i) Trade between India and Turkey is negligible at present and sincere efforts should be made to improve the level of trade.

⁹Puck: "Indo-Turkish Trade", *The Financial Express*, February 11, 1968.

- (j) Good markets exist in Turkey for Indian metal products, engineering goods and hand tools and implements. Even the past trade in jute goods may be profitably revived.
- (k) Possibilities of importing mercury and a few other minerals, cotton of special quality, some non-ferrous metals, etc., from Turkey exist and efforts should be made to establish trade with Turkey on a bilateral basis.

AN ANALYSIS OF TRADE BETWEEN INDIA AND BRAZIL

II. NOMINAL AND EFFECTIVE TARIFFS

*By Gian Singh Sahota**

IN order to see whether the government of a country encourages or discourages imports of particular commodities relative to others, one needs simply look at the nominal tariff structure and the quota system of that country. The quotas, with reasonable approximations, can be translated in terms of the implicit protection rates. The quotas, even when converted to implicit tariff rates and the nominal tariff structure, however, do not always reflect the effective rate of protection provided to the domestic industry. The effective rate of protection, to be defined precisely and rigorously in the succeeding paragraphs, indicates the rate of tariff on the given final commodity net of the tariffs on the inputs of that commodity. The relevant concept that affects (primarily) the domestic producer is the "effective tariff" rather than the nominal tariff. The concept that is (directly) relevant to the domestic consumer, on the other hand, is the nominal tariff. In the development of international trade both the producers as well as the consumers are partners.

A knowledge of the gap between the nominal and the effective rates of protection may be a help in designing or reforming of the tariff structure or, at least, in understanding of it. Moreover, if the rate of expansion of the protected industry and the implied lowering of the costs of production—consequent, e.g., upon on-the-job learning, technical change embodied in the increasing quantity of new capital, economies of scale, external economies, and so on—are influenced by the degree of protection (as according to the infant-industry argument), then the concept of effective protection rather than nominal protection seems to be more relevant in studying the prospects of trade. Furthermore, since the competing wage differentials among the protected and unprotected industries, other things being equal, are in general not likely to be inordinately large, high protection will indicate either high profit rates or relative inefficiency. High profit rates are, by and large, observable, hence the two outcomes can be distinguished. The existence of high profit rates may indicate export potential, the prevalence of inefficiency

*The views expressed in this paper are entirely those of the author.

the reverse. In addition, the changes in relative costs of production, the resulting relative prices of products, and so the export potential, or other criteria to assess the realisation of the intended effects of protection, must be related to the effective, rather than nominal, rates of protection. The static and dynamic comparative advantages must be judged on the basis of the effective tariffs. Also, looking at the nominal tariff is equivalent to confining the study to a partial analysis only. The calculation of the effective tariffs is an approach to a general analysis in that it involves taking the inputs and outputs of various vertically integrated production processes into full account. Finally, the knowledge of the effective rates of protection *per se* is important in the analysis of foreign trade. For these and other reasons, most of the remaining part of this study will be devoted to the calculation and analysis of the effective rates of protection of Brazil and India.

The effective rate of protection as defined by Johnson and, following him, by others measures the excess of domestic value added over value added at world prices.¹ The excess is usually expressed as a percentage of domestic value added at world prices. It signifies (either) the additional domestic factor cost and so the domestic economy's low efficiency and (or) higher rate of profit to the given producers. Thus, while nominal rates of protection express the margins by which domestic prices could exceed foreign prices and still remain competitive—equivalent to a tax on the consumers of the commodity subject to duty—the effective rates of tariffs indicate the extent to which factor payments could exceed those possible under free trade—a subsidy to factors of production. Symbolically, assuming the input coefficients are constant in the relevant range, there is no trade in factors of production while product supplies are elastic, the effective rate of tariff on product j , call it τ_j , is given by the relation

$$\tau_j = \frac{w_j - v_j}{v_j}, \quad \dots (1)$$

where w_j is value added in industry j per value unit of product j in presence of tariff, i.e., the actual remuneration of domestic factors of production expressed (for the moment) in world market prices and v_j is domestic value added at world market prices, i.e.,

¹See, e.g., Harry G. Johnson [1964] [1965] and Balassa [1965]. Amongst the other known published studies are those by Basevi who wrote his Ph.D. thesis under H.G. Johnson, parts of which were published in his [1966], Corden [1966], and Saligo and Stern [1966]. The studies of effective tariff seem to have caught the vogue in the past 2-3 years and by now a number of such studies for various countries are understood to have been undertaken, particularly, under the supervision of Balassa and auspices of the World Bank.

value added under free trade. (The world market price, for the purpose in hand, will be understood to be the c.i.f. import price, i.e., the f.o.b. price plus transportation, insurance and freight costs to the points of national ports or other places of disembarkation of imported goods).

Assuming further that the domestic prices rise above the world prices exactly by the amount of tariff² and when the material inputs, i , are also subject to tariff, Relation (1) can be written as

$$\tau_j = \frac{\left[(1 + t_j) - \sum_i a_{ij} (1 + t_i) \right] - \left[(1 - \sum_i a_{ij}) \right]}{1 - \sum_i a_{ij}} \quad \dots (2)$$

$$= \frac{t_j - \sum_i a_{ij} t_i}{1 - \sum_i a_{ij}} \quad \dots (3)$$

where t refers to nominal *ad valorem* tariff, the a_{ij} are the cells of the input-output table where j refers to the final product and i to its material inputs, and are measured in world market prices.

It is evident from Relation (3) that, given the assumption made in the preceding paragraph, effective rates of protection will be positive when the tariff on the product itself is higher than the weighted average tariff on its material inputs and *vice versa*. The

higher the proportion of value added in gross production, $1 - \sum_i a_{ij}$,

the lower the effective rate of protection and *vice versa*. The effective rate of protection will be zero when all imports are subject to identical *ad valorem* duty.

The foregoing relations were expressed in world prices. The data, however, are invariably available in domestic prices. Therefore, Relation (1) needs be expressed in terms of domestic prices. Marking the terms measured in domestic prices by primes, we have

$$w' = w(1 + t_j), \quad v' = 1 - \sum_i a'_{ij}, \quad \text{or} \quad v = \frac{1}{1 + t_j} - \sum_i a'_{ij} / (1 + t_i). \quad \text{Accord-}$$

²The studies of effective rates of protection published so far (see footnote 1) almost without exception make this assumption. In this study, this assumption will be relaxed. See the text that follows.

ingly, Relation (1) becomes

$$\tau_j = \frac{w'_j - v'_j}{v'_j} = \frac{w'_j}{v'_j} - 1 = \frac{\frac{w'_j}{I}}{\frac{I}{I + t_j} - \sum_i \frac{a'_{ij}}{I + t_i}} - 1 \quad \dots (4)$$

It is apparent that τ for $v'=0$ is not defined, while for $v' < 0$, the τ but not v' itself, is meaningless.³

The foregoing relations were expressed in unit values. The published data, however, are typically available in total values—the input-output tables of India and Brazil are also available in total values. To convert the foregoing relation to an empirically calculable relation, therefore, we multiply all terms in the numerator and

³Ordinarily, the domestic value added at domestic prices, w' , cannot be negative, though special cases of it cannot be excluded. A commonly known example of $w' \leq 0$ is the Indian handloom cloth. As will be seen in the empirical section, however, the likelihood of negative values for domestic value added at world prices for particular commodities may occur quite frequently. This may, e.g., happen when the domestic product price is considerably above world price due, e.g., to import restrictions while the material inputs may be relatively large and either tariff-free or locally obtainable. This is the case, e.g., for rubber manufacturing in India where raw rubber is obtainable from local plantations and, for which value added is a relatively small proportion of gross output. Negative v can also occur when the industry is highly protected under, e.g., the import-substitution programme, which may need a substantial value worth of spare parts for maintenance, etc., from abroad and, as is the usual experience of the underdeveloped countries, the foreign firms having sold the main assembly plant may unduly overprice the (in general almost unsubstitutable) spare parts which may otherwise be even freely importable. In that case, in the formula given above, the number 1 in the denominator is deflated by a relatively high index of $(I + t_j)$ relative to the deflator $(I + t_i)$ to be applied to a'_{ij} .

As stated earlier, τ_j is meaningless when $v_j \leq 0$. (Basevi [1965] has called it as an "absurd result"). However, the negative v_j itself is quite meaningful and interesting: the country has neither comparative nor absolute advantage in the production of the commodity. It may mean that the opportunity (and monetary) cost of resources used in the industry concerned is higher than their output. The resources are malallocated and inefficiently employed.

In order to make the relation for τ_j definable in the case of negative value added, some economists (e.g., Saligo and Stern [1965] and Lewis, Jr. [1967, Appendix, p. 2-3]), have suggested the use of w' instead of v' in the denominator in (4), viz., $\frac{w' - v'}{w'} = 1 - \frac{v'}{w'}$ instead of $\frac{w' - v'}{v'} = \frac{w'}{v'} - 1$.

(Continued on next page)

the denominator by the total value of the domestic product, Q'_j . The resulting relation is

$$\tau_j = \frac{\frac{Q'_j}{1 + t_j} - \sum_i \frac{W'_j}{A'_{ij}(1 + t_i)}}{\frac{Q'_j}{1 + t_j} - \sum_i \frac{W'_j}{A'_{ij}(1 + t_i)}} - 1 \quad \dots (5)$$

(Continued from previous page)

As may be seen from the following illustration, however, in principle this is not a fool-proof remedy. In this figure, τ_j is measured on the ordinate and v'

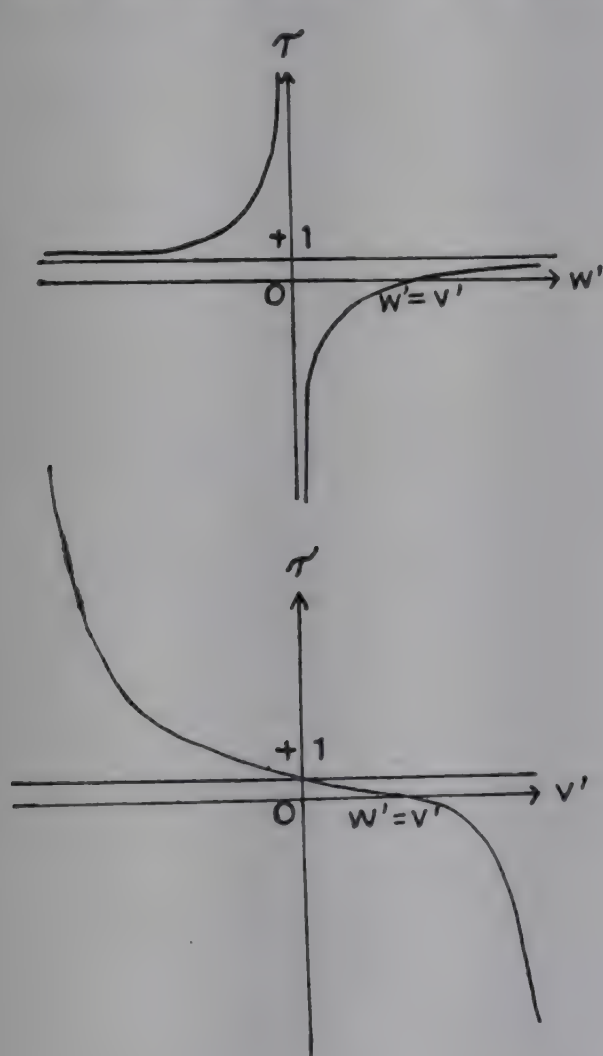


Fig. 3.a. $(w' - v')/w'$.

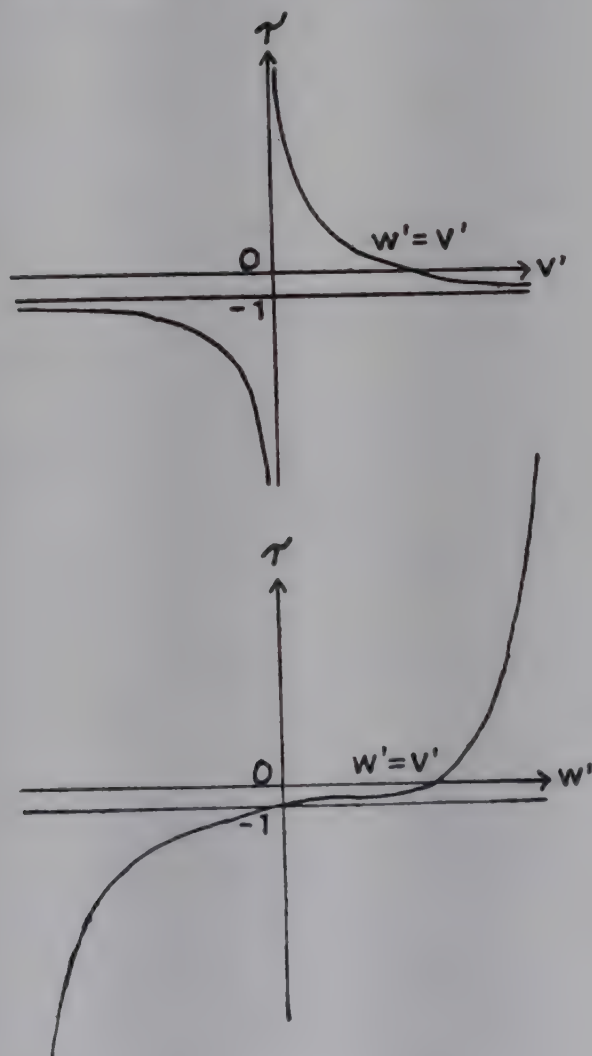


Fig. 3.b. $(w' - v')/v'$.

Figure 3—An illustration of the formulae (a) $(w' - v')/w'$, and (b) $(w' - v')/v'$.

or w' are measured on the abscissa. It may be seen that $\frac{w' - v'}{w'}$ is an exact reflection of $\frac{w' - v'}{v'}$. The point in favour of the relation $\frac{w' - v'}{w'}$ is that w' is less likely to be zero or negative. The superiority of relation $\frac{w' - v'}{v'}$ lies in its base, the world price, being more logical in that it provides a common basis which permits of relevant comparisons of the effective tariff rates among countries,

where W'_j is the total value added in domestic industry j at domestic prices, and A'_{ij} the total value of the material input i used in the domestic production of product j at domestic prices. All the categories on the right-hand side of (5) are observable, so the effective rates of protection can be computed.

In the foregoing relations, we made the assumption that domestic prices are equal to the c.i.f. prices plus tariffs. This assumption provides us only a first approximation. In the actual world, this assumption is unlikely to hold in toto. The currencies of both Brazil and India have remained and continue to remain overvalued. A continuous overvaluation of a currency is equivalent to subsidising imports and imposing a duty on exports. However, when a domestic currency is overvalued, the government, of necessity, applies quotas for the use of foreign exchange. The quotas are equivalent to implicit tariffs. Again, some tariffs may be redundant because, due to competition, or other reasons, the domestic prices are not raised by the full amount of the tariff and so the legal tariffs overstate the protection rate. Moreover, domestic production may be subject to excise duties and national exports to export duties. In view of these additional distortions, the foregoing relation may not be a true index of the effective rates of protection. Hence, certain modifications are in order.

A currency overvaluation may be accounted for as follows:

$$\tau_j = \frac{W'_j}{\frac{Q'_j}{(1+t_j)/(1+m_j)} - \sum_i \frac{A'_{ij}}{(1+t_i)/(1+m_i)}} - 1, \quad \dots (6)$$

where m is the rate of overvaluation of the domestic currency, and W'_j now is assumed to include the effects of currency overvaluation, and similarly Q'_j and A'_{ij} .

A more relevant measure would be to make direct price comparisons at appropriate exchange rates. Suppose the domestic prices differ from the world (c.i.f.) prices by s_i or s_j per cent (as the case may be) and there are no domestic excise duties (and sales taxes, if any, apply both to the imported and domestically produced commodities uniformly), then the effective rate of protection is given by

$$\tau_j = \frac{W'_j}{\frac{Q'_j}{1+s_j} - \sum_i \frac{A'_{ij}}{1+s_i}} - 1, \quad \dots (7)$$

where W'_j , Q'_j , and A'_{ij} are assumed to subsume the effects of tariffs and currency overvaluation. This relation is more interesting in that, if prices are measured at the parity rates of exchange, this relation makes proper allowance for the overstated (redundant)

tariffs, the understated implicit tariffs under import quotas, the overstated nominal tariffs in face of overvalued domestic currencies, and the understated (customarily assumed as zero) tariffs on non-traded goods.

If the domestic production is subject to excise taxes (or any indirect taxes which are not imposed on imported commodities) and assuming the sales mark-up and transportation costs are more or less the same for the imported as well as domestically produced goods, the effective rate of protection is given by

$$\tau_j = \frac{Q'_j (1 - z_j) - \sum_i A'_{ij}}{\frac{Q'_j}{1 + t_j} - \sum_i \frac{A'_{ij}}{1 + t_i}} - 1, \quad \dots (8)$$

where z stands for excise tax. It will be noted that this relation assumes that the factory-gate price rises by the amount of the tariff rate. The effect of the excise tax is to reduce value added rather than alter the sale price. This will be a logical assumption so long as $z_j \leq t_j$ which is generally the case.

Finally, it may be of interest to study the division of tariffs between product and materials or consumers and producers. This may be obtained by rearranging Relation (3), i.e.,

$$t_j = t^*_j + \bar{t}_{ij}, \text{ or } t^*_j = t_j - \bar{t}_{ij}, \quad \dots (9)$$

where we write $t^*_j = \tau_j (1 - \sum_i a_{ij})$ and $\bar{t}_{ij} = \sum_i a_{ij} t_i$. In this relation,

t^*_j shows the proportion of the nominal tariff that benefits domestic producers and t_j the direct tariff burden on domestic consumers.

Having derived the necessary relations for the effective rates of tariffs, we next address ourselves very briefly to the intricate problems of measuring appropriate (average) t 's, m 's, s 's, z 's and a_{ij} 's.

Tariff and Excise Averaging: The tariff and excise tax classifications generally do not correspond to the standard industry classification or the classification of the national input-output tables. The industry classification data are available from the industrial, agricultural and similar census reports, but the Indian and Brazilian census reports do not give detailed breakdown of material inputs. This need not be lamented, however, as even the US industrial census reports do not contain adequate data on material inputs and from one-third to two-thirds of material inputs are lumped together

under "other material inputs". The next available source on inputs are the input-output tables. These, however, are too aggregative to provide information coextensive with tariff classifications—the Indian input-output tables consist of 77 industry categories while the Brazilian tables consist of no more than 32 industry categories. Accordingly, one has to calculate average tariff and excise rates, which correspond to the input-output tables. These averages, as far as possible, should be the weighted averages. Weights could be the import values, domestic consumption, domestic value added or world trade in the commodity concerned. In certain cases, the tariff collections could, with certain modifications, be used as weights. Unfortunately, none of the above series are easily available. For example, in India, only the aggregate tariff yield for the import category No. 9: "Motor cars, cycles, scooters, omnibuses, chassis, vans, lorries, and parts thereof", for the year 1965-66 is given and is Rs 265.1 million. On the other hand, the tariff rates are available for at least 20 different sub-categories of imports under this head. These tariff duties range from 20 per cent for nozzle-holders, etc., to 77.5 per cent for certain parts and accessories. Still another category that has to be lumped up with cars (because of lack of appropriate rows in the input-output matrix) is No. 16: "Railway plant and rolling stock". The tariff yield from this category is Rs 139.5 million. This import category has nine major sub-categories of tariffs which range usually between 10 per cent to 75 per cent. Both of these major categories (Nos. 9 and 16) had to be put in the input-output table industry No. 4: "Transport equipment". The simple average came to about 27 per cent, which was the average tariff rate used for this import category. Evidently, there is much scope for another researcher, who may have access to more detailed and comprehensive data, to improve upon the calculated averages of this study. It is likely that he may come out with somewhat different results. Further research in this field, therefore, is recommended. In general, the average tariffs, as calculated in this study, for the industries in India were either the modal values or simple averages. Specific taxes were converted into *ad valorem* taxes on the basis of the available data on unit prices. Otherwise the *ad valorem* duty on a closely related import category was employed. Certain sundry items, like No. 79: "Other materials" and similar "traded" categories, were assigned a weighted average tariff on all of the non-zero-tariff commodities. When a particular industry was considered to be chiefly but not entirely using the non-traded goods as material inputs, a weighted average of all the (traded and non-traded) goods was used. This applied, e.g., to wood, timber and forest products. In still other cases, the tariff rate of the major import commodity produced by the industry was used for the entire industry. An element of personal judgment in this choice is

apparent. The percentages were rounded off to whole numbers. For Brazil, the weighted average tariffs, as available at EPEA, Ministry of Planning, were used.⁴ Further details will be found in the footnotes to the respective tables of this study.

Port Charges, Import Surcharges and Related Non-Tariff Measures: Apart from straight tariffs, there are sometimes several other direct charges such as the port assessment tax, warehousing fee, import surcharges and similar charges. According to an estimate for Brazil, these extra taxes amount to 13 per cent of the c.i.f. value plus about 1 per cent of tariff charges.⁵ These extras including the quota restrictions are supposed to be included in the average tariffs as computed by EPEA for Brazil. For India, only those surcharges and related extras that are published in the tariff schedule were taken into consideration. The remaining restrictions will, however, be automatically accounted for when the calculations are made from the direct price comparisons (for India only).

Treatment of Non-Traded Goods: The non-traded material inputs and services, mainly motor and railway transportation, electricity, and post office, banking and similar services, could either be treated in the same way as the factors of production (labour and capital)⁶ and be included with value added or be treated as material inputs with zero tariffs.⁷ On the other hand, if capital is also internationally traded, one may like to calculate the rate of protection on labour alone.⁸ In this study, for India, electricity and other domestic services (specifically Rows 74, 82, 83, 84 and 86) were included in material inputs and were assigned zero tariff rates.

Treatment of Depreciation and Repairs: Since "net value added" rather than "gross value added" is the relevant concept here,

⁴See, e.g., Joel Bergsman [1967]. This study was confined to the manufacturing sector only. For the purpose of the present study, all of the sectors were included. This amounts to extending the study to 32 sectors instead of 23 analysed in the EPEA study. The average tariffs for the non-manufacturing sectors were calculated. Since most of the latter consist of non-traded goods, these calculations did not present much difficulty. They were assigned zero tariff rates. Others were assigned an average of all tariffs. Still others like "Residual" sector, which contains repairs and depreciation, were assigned weighted average of the relevant capital-goods-producing industries. For details, see the footnotes to the respective table.

⁵See Paul Clark and Richard Weisskoff [1966].

⁶This method has been recommended by W.M. Corden [1967].

⁷This method was used, among others, by Balassa [1965].

⁸As, e.g., was done by Basevi [1966].

it was decided to treat depreciation and repairs together with material inputs. In the Indian input-output tables, the net output of the electrical and non-electrical machinery and transport equipment (Industries Nos. 2, 3 and 4) is almost entirely shown in the "final demand" sector under the item, "gross fixed capital formation". The cells of the consuming industries of the rows of these industries are almost all blank. Since in this study, capital is treated as a protected factor of production, this is a desirable classification. This classification implies, however, that machinery and spare parts used for repair and maintenance are most likely to have been included in the row for "repairs". Furthermore, since it is the flow of capital that enters cost and not investment or stock, depreciation is the relevant element in A_{ij} to which tariff should be applied. "Depreciation", however, consists of construction (mainly a home production item) and machinery (chiefly imported) while "repairs" consist of spare parts (largely imported) and repair services (almost entirely supplied by local technicians). In view of this, for India, an average tariff rate on electrical, non-electrical and transport equipment (Rows 2, 3 and 4 of the Input-Output table) was applied to three-fifths of the sum of repairs and depreciation (Rows 81 and 85 of the Input-Output table).⁹

DIRECT PRICE COMPARISONS

The collection of c.i.f. prices and the domestic factory-gate or retail prices for different commodities by itself constitutes a major task. The data have to be collected from diverse sources which may include books of the wholesalers, purchasers of goods, market reports, customs records, surveys, questionnaires and so on. Adjustments have to be made for quality differences, differentiated products, mark-ups and similar categories. It is evident that this is not an easy task for an individual researcher. The only direct price comparisons available for any underdeveloped country known to the author are those for Pakistan.¹⁰ Fortunately, Pakistan is contiguous to India and so close economically that the use of the prices in Pakistan relative to the world prices as indexes for the corresponding relative prices for India does not seem to be inappropriate. Also, the available prices in rupees can be considered comparable without much adjustment. In general, in the year under reference, the prices of major food staples in Pakistan were roughly 20 per cent below the corresponding Indian prices, while the manufacturing

⁹The norm three-fifths was chosen after discussions with the specialists in this field.

¹⁰These prices were collected by Pal [1964] and [1965] and extended by Lewis [1967].

and other non-agricultural prices were by and large, comparable. The food prices, however, affect only one of the 75 industries of this study, i.e., No. 32. In some of the obvious cases, however, the Indian and the world prices were calculated independently. This applies, for instance, to the fertiliser price. When the industries for which prices were collected for Pakistan did not exactly correspond to the industries considered in this study for India, they were made to correspond to the nearest category. For a number of Indian products, however, even the Pakistan prices are not available. In such cases, the average price of one of the three relevant sectors, consumption goods, intermediate goods and capital goods, was applied. The average price for consumption goods in Pakistan was 157 per cent above the world price. No such data could be obtained for Brazil.

The results of the application of (5), (6), (7) and (8) to India and Brazil are presented in Tables I (p. 210) and II (p. 214) respectively. Among the main conclusions of the calculated effective rates of protection are:

The calculations of Relation (5) for India indicate no clear-cut pattern of protection among consumption, investment and intermediate goods. The investment and intermediate goods are just as lightly or heavily subjected to import duties as consumption goods. The relatively lightly protected industries are naturally the public utility and similar services (because import of electricity, motor/railway transport or construction is impossible while the inputs of these services are subject to import duty); typically native consumption goods like *bidi*; fertiliser and insecticides (because of the current policy of increased supply of fertiliser to farmers from all sources); certain intermediate goods like cotton yarn; and certain consumption goods like biscuits. Amongst the most highly protected industries are, mainly, the consumer-goods industries such as textile industries of various types, sugar, vanaspati, starch and perfumery, and certain intermediate goods like rubber and miscellaneous chemicals. The levels of protection to some of the investment goods, e.g., electrical equipment, and iron and steel, also exceed the median tariff.

The pattern of protection as calculated from Relation (5) for Brazil is, by and large, distinguishable. The highly protected industries are those producing consumer goods such as tobacco, clothing, textiles, furniture, perfumes and food products. Transport and electrical equipment industries also have high protection but considerably less than the consumer-goods industries just mentioned. Intermediate goods

have intermediate protection, while agricultural production and public utility services, as usual, have the least, in fact, negative protection.

The Indian industry as a whole is less heavily protected than the Brazilian industry as a whole. The simple average rates of nominal and effective protection [as calculated from Relation (5)] are 0.2621 and 0.5872 respectively for India, and 0.8150 and 2.18 respectively for Brazil. The corresponding weighted averages are 0.0748 and 0.1927 respectively for India, and 0.2885 and 0.9361 respectively for Brazil.

The effective rates of protection, thus, are substantially higher than the respective nominal rates of protection in the two countries and both rates are substantially higher in Brazil than in India.

A surprising result of these calculations is that domestic value added at world prices becomes negative in 10 out of 75 industries studied for India and in 4 out of 32 industries for Brazil.

Excepting possible errors in the data, e.g., inaccuracies in the calculated average nominal tariff rates, the domestic value added becoming negative when expressed in world prices indicates gross malallocation of resources and inefficiency of production. There is no cause for despair, however, provided these conditions are transitory and the inefficiency is being gradually reduced as the markets develop, and the industries expand in size, gain in experience and acquire technical know-how. A test of this dynamic performance will be provided in the succeeding section.

The ranking of industries according to the levels of protection is, by and large, the same under nominal as under effective tariffs though there are noticeable divergences. This information along with additional calculations is provided in Tables III (p. 216) and IV (p. 219) respectively for India and Brazil. The calculations are also sketched in Figures 1 (p. 226) and 2 (p. 227).

When the overvaluation of the domestic currencies—which is equivalent to a subsidy or negative tariff on imports—is allowed (Measure 2), the ranking is not altered in relation to those of Measure 1, and the industries which had negative domestic value added at world prices continue to be so even in this case. The levels of effective rates of protection, however, fall by significant margins. The simple and weighted averages for these effective rates come to 1.752 and 0.662 respectively for Brazil, and 0.3511 and 0.1114 respectively for India.

The effective rates of protection for differences in absolute domestic and world prices were computed for India only. In this case, the magnitudes, the range and the ranking diverge significantly from the corresponding values in the case of nominal tariffs for about one-fourth of the industries. The investment goods, e.g., iron and steel, electrical equipment and non-electrical equipment, fall, by and large, near the median level of protection. The lightly protected industries are those producing consumer goods such as flour mills, fruit and vegetables, *bidi*, biscuits, *gur* and *khandsari*. Fertiliser remains lightly protected. The highly protected industries are, again, most of the fine textiles, perfumes, drugs and pharmaceuticals, rubber products, sugar, tobacco products and plastics. The industries that fall significantly in their ranking of the levels of protection are: salt, fruit and vegetable preservation, cashewnut processing, jute textiles, chinaware and pottery, and certain forest products. The major reason for the decline in the ranking of these industries is, apparently, the relatively low domestic prices of these products due either to an abundant supply relative to demand (e.g., fruit, jute, textiles and pottery); relative shortage of demand due to low incomes in general (e.g., cashewnut processing); or deliberate government policy (as, e.g., in the case of salt). Amongst the industries that rise significantly in ranking are: cement, cotton yarn, jute, woollen textiles, man-made fibres, rubber products, plastics, drugs and pharmaceuticals, railway, electricity and miscellaneous chemicals. These results seem to follow, in part, from the domestic prices of these products and services being considerably higher than the corresponding prices in the world markets. The tariff rates used for the former products (i.e., those products that fall in ranking), therefore, overstate the degree of protection, and those for the latter (i.e., the ones that rise in ranking) understate the degree of protection. On the whole, the levels of protection are higher under direct price comparisons than under the earlier estimates. The number of products with negative domestic value added at world prices stays at 11. *Prima facie*, these calculations appear to be more consistent with observations than the earlier ones do.

The third measure used for Brazil (i.e., the one with adjustment of protection for domestic excise taxes) provides practically no additional information over the other two measures for this country. The ranking remains by and large the same. The simple average effective rate of protection under this measure falls between the two earlier effective rates, i.e., 2.021 as against 2.18 of Measure 1 and 1.752 of Measure 2.

Finally, the results of Relation (9) for India and Brazil are presented in Table V (p. 220) in a comparable form. It will be seen

that tariff protection as computed by this relation is about 80 per cent higher in Brazil than in India (using simple averages). The corresponding protection under nominal tariffs (using simple averages), as seen earlier, is about 120 per cent higher for Brazil than for India. Again, the net protection under Relation (9) is less than one-third of gross nominal protection in Brazil, whereas it is a little over one-half of the gross protection in India.

It will be seen that the tariff burden on the domestic consumer (t_j), the tariff cost to the domestic producer (t_{ij}), as well as the rate of protection [as indicated by Relation (9)] to the domestic producer (t^*_j) are all considerably higher in Brazil relative to the corresponding values for India. This conclusion is not likely to alter by very much even if we recognise that due to the non-incorporation of the effects of various physical restrictions of imports in India, the levels of average nominal tariffs, as calculated for this country in the present study, are under-estimated. It may be remarked that a sweeping import liberalisation has been going on in Brazil since 1964. In the reference year, 1966, the tariffs were considerably lower as compared with those in 1964. Furthermore, a general tariff reform and reduction of tariffs that became effective from March 1967, reduced the overall tariff burden to a little more than a quarter of that in 1964. On the other hand, the Indian tariff levels have undergone relatively minor changes since the early 1950's. Even after the dramatic and sweeping tariff reductions in Brazil during the past three years, the overall tariffs are still over double of those operating in India. The Indian supplier faces a higher tariff wall in Brazil than does the Brazilian supplier in India.

AN EVALUATION OF THE EFFECTS OF PROTECTION

The purpose of this section is to evaluate the probable effects of protection. With a view to doing that, several simple regressions were run using nominal and effective rates of protection as the independent variables and the following variables representing either the resulting industrial structure or the progress of various industries as the dependent variables:

- (a) Scale economies.
- (b) Expansion of output of the industry.
- (c) Change in labour or capital intensity.

Scale Economies: An important argument for protection is to attract the entrepreneurs into the industry with the prospects of their earning high profits or at least assured profits unhindered by foreign competition. High or stable profits for some time will serve as an

enabling factor, through reinvestment, as well as an incentive to the entrepreneurs to expand the industry. In due course, as, e.g., under the infant-industry argument, the industry must become competitive with foreign suppliers. Scale economies are a major factor that is supposed to contribute to the attainment of competitive standards.¹¹ Not all industries may be reaping scale economies, however. In any case, it is the *relative*, and not the absolute measures of scale economies in different branches of the domestic economy that are relevant in the context of this study. Even more pertinent is the measure of the scale economies of the domestic industry *relative* to the corresponding industry in the major exporting countries. Lastly, the measures of scale economies may differ depending upon the methodology used, specification of the production function and similar differences. In view of this, for India, four different measures of scale economies were tried as the relevant variable to be regressed on tariff series, viz.,

- (i) Scale economies for 26 of the domestic manufacturing industries, as computed by Diwan [1967] (S_1).
- (ii) Scale economies for 26 of the domestic manufacturing industries, as computed by Yeong-Her Yeh [1967], Table 3, last but one column (S_2).
- (iii) Scale economies for 26 of the domestic manufacturing industries, as computed by Yeong-Her Yeh [1967], Table 3, last column (S_3).
- (iv) Scale economies of Item (iii) above (S_3) *relative* to the scale economies for the corresponding industries in the United States, as available from Hildebrand and Liu [1965] (S_4).

For Brazil, the only known study on scale economies is the one by Rocca, at the two-digit-industry level [1967]. An interesting aspect of Rocca's study is that, by introducing the plant size and the market size into the production function, he makes separate estimates of internal economies and external economies of scale. In the underdeveloped countries, the creation of external economies is usually advanced as an important argument for protection. Thus, three measures were tried for Brazil: (1) the series of internal economies of scale (S_1), (2) the series of external economies of scale (S_2), and (3) the first series relative to the corresponding series of scale economies for the USA (S_4).

¹¹Technical change, resulting from experience, superior know-how, etc., is another factor that reduces costs. This variable could not be used as the relevant estimates of technical change for individual industries were not available at the time of writing this paper.

Each of these series of scale economies were regressed on the series of (a) nominal tariffs, t , (b) effective tariffs of Measure 1, τ_1 , and (c) effective tariffs as computed in Measure 3, τ_2 .

The results, presented in Table VI (p. 223), fail to indicate any relationship between scale economies and levels of protection. For India, the simple squared correlation coefficient (r^2) seldom exceeds .05; none of the regression coefficients is significantly different from zero; and five out of a total of eight regressions have even wrong signs.

For Brazil, the results are no better. The correlation is even lower than that found for India, the regression coefficients with respect to nominal tariffs have negative (wrong) signs and those with respect to effective rates have positive (right) signs, but none is significantly different from zero. Neither internal economies of scale nor external economies of scale show any relationship with protection.

Thus neither in India nor in Brazil have tariffs been so structured as to favour industries that may potentially reap the economies of scale that are higher than those in the non-protected (or less-protected) domestic industries. Nor do the tariffs benefit those domestic industries the ratio of the scale economies of which to the scale economies in the corresponding industries in the USA is higher than the corresponding ratio in the non- or less-protected industries. The predominance of negative signs of the regression coefficients further indicates that the relatively high increasing-return industries have, indeed, been penalised to spoonfeed those in which returns-to-scale are no higher. Insofar as returns-to-scale are concerned, therefore, protection appears to have been structured without sufficient regard for dynamic comparative-cost advantage.

Expansion of Output: The second set of regressions consists of the expansion of the outputs of the industries concerned on tariffs. Output can expand due (in addition to the scale factor studied above) to an increased employment of factors of production and technical change in the industry concerned. The picture here, however, is no better. For India, the squared correlation coefficient, once again, hardly exceeds .05, and five out of six regression coefficients have even wrong (negative) signs (though not significantly so). The highly protected industries have not expanded more rapidly than the less-protected or unprotected industries.

In the case of Brazil, the correlation coefficients and the regression coefficients between output expansion and tariffs are negative, but not significantly. These results indicate that either the protected industries are passing under the control of monopolies (in-

cluding state monopolies) or oligopolies (or monopsonies or oligopsonies), where output does not expand as much as it would under competitive conditions; or (and this includes the above case too) the resources are malallocated. The industries protected under the present Indian and Brazil tariff structure seem to enjoy the comparative-cost advantage neither in relation to the foreign industries nor in relation to the unprotected or relatively less-protected domestic industries. In Brazil, insofar as tariffs have been drastically cut during the past three years and the range has been narrowed, the trend is apparently towards the right direction.

Changes in Labour Intensity: It is a general impression that the protected industries will absorb more labour per unit of output. This is currently one of the major objectives of economic development planning in the overpopulated economy of India. Whether labour intensity *per se* is economically desirable or not has to be judged on various criteria in which we need not enter here. But a study of the labour intensity, resulting from differential protection to different industries, would in itself be of some interest. Accordingly, in a third set of regressions, two measures of changes in labour intensity between 1959 and 1964 were regressed on the series of nominal and effective protection calculated earlier for Brazil. These measures are (a) the ratio of wage cost to value added, and (b) the labour to output ratio. For India, labour input by industries was not handy for this study. Hence a measure of capital intensity, the obverse of labour-intensity, was used, i.e., the ratio of depreciation cost to value added (available from the input-output tables). Here, too, the results fail to show any relationship between labour or capital intensity and protection.

In summary, the main conclusion of this section is that neither the "intended" protection (as represented by nominal tariffs) nor the "actual" protection (as indicated by effective tariffs) seems to have benefited the domestic industries and, for that matter, the overall economy. It may be recalled that the heavy industries like iron and steel are not the ones that are highly protected in either country. As seen in Section 3, these industries, indeed, fall near the median levels of protection in both the countries. Similarly, the new industries are not the usual ones which enjoy the highest levels of protection. Not too unusually, the most highly protected industries are the old established industries such as textiles. In the absence of any (computed) relationship between the existing levels of protection and the comparative-cost advantage as might be assumed to be reflected by scale economies, output expansion, employment increase, etc., lesser harm will probably be done to the growth of the two economies if the tariff inequities among the industries are replaced by a uniform tariff rate on all industries.

TABLE I
ALTERNATIVE MEASURES OF THE EFFECTIVE RATES OF
PROTECTION, INDIA, 1965-1966^a

<i>Input-output industry</i>		<i>Nominal tariffs ad valorem</i>	<i>Effective tariffs</i>					
<i>No.</i>	<i>Name</i>		<i>Measure 1^b</i>		<i>Measure 2^c</i>		<i>Measure 3^d</i>	
		<i>Ad valo- rem^e</i>	<i>V/Q^f</i>	<i>Ad valo- rem^e</i>	<i>V/Q^f</i>	<i>Ad valo- rem^e</i>	<i>V/Q^f</i>	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Construction	0.00	— .12		— .24		0.00	
2	Electrical equip.	0.46	2.06		0.31		.27	
3	Non-elect. equip.	0.25	.52		1.57		.88	
4	Transport equip.	0.27	.46		.24			— .05
5	Metal products	0.34	.99		.70		1.12	
6	Iron and steel	0.27	1.76		1.14		.37	
7	Iron ore	0.00	— .01		— .13		.62	
8	Cement	0.00	— .26		— .36		.29	
9	Non-ferrous metals	0.25	.67		.43		.27	
10	Other minerals	0.25	.27		.09		1.63	
11	Rubber	0.25		— .11		— .13		— .22
12	Leather	0.25	.81		.55		21.37	
13	Other leather prods.	0.25	.13		.12		.58	
14	Leather footwear	0.25	.39		.17		.44	
15	Animal husbandry	0.25	.44		.33		.19	
16	Flour milling	0.00	— .06		— .19		— .90	
17	Sugar	0.25		— .01		— .001		— .12
18	Plantations	0.00	— .02		— .15		.35	
19	Gur and khandsari	0.00	— .01		— .20		— .42	
20	Vegetable oils	0.25	.31		— .62		1.23	
21	Vanaspati	0.25	.64		.38		1.07	
22	Salt	0.25	.37		.14		— .18	
23	Starch	0.25		— .01		— .004	.30	

TABLE I (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
24	Milk products	0.25	1.48		1.85		— .26	
25	Breweries, etc.	0.25	.51		.22		3.07	
26	Biscuits, etc.	0.00	— .23		— .34		— .58	
27	Cigarettes, etc.	0.40	4.09		3.21		.06	
28	Bidi	0.00	— .15		— .27		— .61	
29	Other tobacco prods.	0.40	52.10		29.00		4.00	
30	Fruit & vegetable preservation	0.25	2.92		1.18		— .65	
31	Cashewnut processing	0.91		— .23		— .27		— .009
32	Foodgrains	0.00	— .01		— .15		— .09	
33	Cotton	0.35	.40		.20		.55	
34	Cotton yarn	0.07	— .19		— .31		.83	
35	Cotton textiles	0.87		— .19		— .22	.09	
36	Jute	0.00	— .01		— .10		.48	
37	Jute textiles	0.25	2.71		1.97		.21	
38	Woollen yarn	0.25	.46		.24		— .07	
39	Woollen textiles	0.80	5.60		5.90			— .19
40	Raw silk	0.25	.77		.55		.00	
41	Silk textiles	1.00		— .16		— .19		— .018
42	Man-made fibres	0.25	.48		.17			— .140
43	Artificial silk fabrics	0.85		— .13		— .15		— .048
44	Other textiles	0.87	312.00			— .11	.27	
45	Oil-seeds	0.25	.28		.11		1.08	
46	Sugarcane	0.00	— .009		— .15		— .10	
47	Tobacco	0.25	.26		.07		— .06	
48	Fruit, vegetables	0.00	— .006		— .14		— .27	
49	Other crops	0.00	— .002		— .16		— .03	
50	Fertilisers	0.00	— .17		— .78		— .36	
51	Ceramics, bricks	0.00	— .06		— .20		— .34	
52	Glass and glassware	0.25	.34		.15		— .20	

TABLE 1 (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
53	Wood products	0.20	.37		.17		.40	
54	Timber	0.07	.001		— .14		— .30	
55	Chinaware and pottery	0.25	.55		.32		— .39	
56	Wood (others)	0.07	.0004		.004		— .03	
57	Other forest prods.	0.07	.29		.10		— .06	
58	Motor transport	0.00	— .19		— .31		— .40	
59	Petroleum products	0.16	.89		.62		.89	
60	Crude oil	0.07	.0003		— .101		1.07	
61	Rubber footwear	0.50	1.70		1.29		4.57	
62	Tyres and tubes	0.50	1.38		1.05		4.03	
63	Other rubber prods.	0.25	.27		.10		5.79	
64	Paper and paper prods.	0.62		— .03		— .03	.24	
65	Plastics	0.25	.52		.27			— .09
66	Dyestuffs	0.29	.395		.20		1.31	
67	Paints, etc.	0.25	.79		.53		1.68	
68	Insecticides, etc.	0.00	— .16		— .38		— .12	
69	Drugs, etc.	0.40	1.17		.85			— .26
70	Soap and glycerine	0.25	1.29		.94		.73	
71	Perfumes, etc.	1.70		— .34		— .39		— .47
72	Misc. chemicals	0.35		— .03		— .03	2.97	
73	Railways	0.00	— .103		— .23		1.38	
74	Electricity	0.00	— .113		— .22		.65	
75	Coal and coke	0.25	.27		.11		1.61	
	SIMPLE AVERAGE	0.262	.587 ^a		.351 ^a		.9685 ^a	
	WEIGHTED AVERAGE ^b	0.075	.193		.1114		.4092	

^aThe nominal tariffs for the industries given are the averages of the component industries. (See the text.) For a number of industries an average tariff of all the internationally traded commodities was used. The services like electricity, railway transport services, motor transport services, postal services,

and the like cannot be imported. The effective rates of protection have, however, been calculated for these sectors also, merely for the completeness of the table of sectors. Nevertheless, the calculated rates show the effects of the import duties on the material inputs and so the cost of production of these services. It is useful in making efficiency comparisons amongst the domestic industries. The production of electricity, e.g., requires machinery which is subject to about 27 per cent import duty. The effect of this on the price of electricity may influence the costs of those industries that use electricity. When multiplied by 100, the figures of this table give present tariff rates.

^bThis measure was computed from Relation (5). In other words, this measure assumes the domestic prices to rise over the world prices exactly by the amount of the tariff.

^cThis measure was computed from Relation (6). In other words, this measure allows for the reduction in tariffs resulting from the average overvaluation of the rupee during the year 1966. For this purpose, the post-devaluation price of the rupee was used. This was to be around 16 per cent above the official rate and was determined from a study of the free-market (or black-market) rates at Hong Kong. These rates are published in the *Weekly Eastern Economist* (Hong Kong).

^dThis measure was computed from Relation (7). In other words, this measure is based on direct price comparisons. The calculations from Relation (8) could not be made as the average excise tax rates were not handy at the time of writing this paper.

^eThose industries for which τ_j remains undefined, i.e., for which $V \leq 0$, are not included in this column.

^fThe industries for which value added at world prices turned out to be negative are included in this column. The figures signify the value added at world prices a percentage of gross output at domestic prices, viz., V/Q' . The absolute values of these figures reflect the degrees of inefficiency of the industries concerned.

^gExcluding the industries which have negative value added at world prices and industries Nos. 29: other tobacco products, and 44: other textiles, the industries Nos. 29 and 44 having very high effective tariffs but value added (weights) so small as may be ignored.

^hWeighted by value added, and not by the value of tariff revenues or import values. This weighted average includes the zero-tariff commodities also. For this measure, industry No. 32 (foodgrains) was omitted as with the high weight that it has in total GNP and with the calculated negative effective tariff, it dominated the tariffs of all other industries and appeared to impart a wrong impression of the weighted average tariffs.

TABLE II

ALTERNATIVE MEASURES OF THE EFFECTIVE RATES OF PROTECTION, BRAZIL, 1966^a

Input-output industry		Nominal tariffs ad valo- rem	Effective tariffs					
No.	Name		Measure 1 ^b		Measure 2 ^c		Measure 3 ^d	
			Ad valo- reme ^e	V/Q ¹	Ad valo- reme ^e	V/Q ¹	Ad valo- reme ^e	V/Q ¹
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Crops, etc.	0.00	— .01		— .18		— .01	
2	Livestock, etc.	0.00	— .17		— .31		— .03	
3	Electric energy	0.00	— .06		— .22		— .22	
4	Commerce	0.00	— .01		— .18		— .18	
5	Services	0.00	— .04		— .20		— .09	
6 ^g	Residual	0.62						
7 ^g	Fuels	0.56						
8 ^g	Packing	0.00						
9	Extractive industries	0.45	.55		.29		.43	
10	Non-metallic minerals	0.76	.87		.56		.68	
11	Metallurgy	0.46	.60		.33		.39	
12	(Other) Machinery	0.41	.45		.21		.27	
13	Electrical equipment	1.04	4.82		3.85		3.39	
14	Transport equipment	0.91	2.08		1.57		1.65	
15	Wood products	0.89	3.12		2.43		2.86	
16	Furniture	1.26	9.89		8.07		7.28	
17	Paper and paper products	0.87	1.44		1.03		1.06	
18	Rubber products	0.97	2.68		2.07		2.07	
19	Leather products	1.02	1.62		1.18		1.28	
20	Chemicals	0.54	1.02		.77		.82	
21	Pharmaceuticals	0.42	.81		.51		.33	
22	Perfumes, soaps, etc.	1.86		— .174		— .021		— .018
23	Plastics	1.16	3.86		4.84		2.94	
24	Textiles	2.00	13.61		11.18		19.68	
25	Clothing	2.20		— .012		— .0014		— .012
26	Food products	1.34		— .185		— .222		— .187

TABLE II (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
27	Beverages	2.00	3.70		2.92		1.33	
28	Tobacco	2.30		— .066		— .079		— .1995
29	Printing and publishing	1.16	2.50		1.91		1.91	
30	Miscellaneous	0.83	1.59		1.16		1.49	
31	Construction	0.00	— .53		— .60		— .60	
32	Transport	0.00	.60		.33		.33	
	SIMPLE AVERAGE	0.815	2.18		1.742		2.021	
	WEIGHTED AVERAGE ^h	0.286	.948		.662		1.069	

^aThe average nominal tariff rates were taken from the EPEA study [1967] with minor extensions. In particular, since in the available input-output tables for Brazil, repairs and depreciation is included in the "residual" sector (No. 6), the average tariff rate for this sector was calculated by weighting three tariffs, viz., those for sectors 11: metallurgy, 12: other machinery, 13: electrical equipment, and 30: miscellaneous, where the "miscellaneous" sector itself is an (arithmetic) average of all tariffs. When multiplied by 100, the figures of this table give present tariff rates.

^bMeasure 1 was calculated from Relation (5).

^cMeasure 3 was calculated from Relation (6). For this purpose, the cruzeiro was assumed to be overvalued by 20 per cent on an average during the reference year.

^dMeasure 3 was calculated from Relation (8). In other words, this measure was computed under the assumption of Relation (5) but adjusted for domestic production taxes. The calculations could not be made from Relation (7) as the direct prices could not be obtained for Brazil.

^eThose industries for which τ_j remains undefined, i.e., for which $V \leq 0$, are not included in this column.

^fThe industries for which value added at world prices turned out to be negative are included in this column. The figures signify the value added at world prices as a percentage of gross output at domestic prices, viz., V/Q' . The absolute values of these figures reflect the degrees of inefficiency of the industries concerned.

^gThese are dummy sectors in Brazil's input-output table, i.e., these are the sectors shown in with zero value added.

^hWeighted by value added, and not by the value of tariff revenues or import values. This weighted average includes the zero-tariff commodities also.

TABLE III

RANKS OF DIFFERENT INDUSTRIES ACCORDING TO THE
DEGREE OF PROTECTION UNDER ALTERNATIVE
MEASURES, INDIA, 1965-66

<i>Industry</i>		<i>Nominal tariff</i>	<i>Effective tariff^a</i>		
<i>No.</i>	<i>Name</i>		<i>Measure 1</i>	<i>Measure 2</i>	<i>Measure 3</i>
(1)	(2)	(3)	(4)	(5)	(6)
1	Construction	1	8	9	21
7	Iron ore	1	14	21	44
8	Cement	1	1	4	34
16	Flour milling	1	11	14	1
18	Plantations	1	13	16	36
19	Gur and khandsari	1	18	12	5
26	Biscuits, etc.	1	2	5	4
28	Bidi	1	7	8	3
32	Foodgrains	1	16	17	17
36	Jute	1	17	23	41
46	Sugarcane	1	15	18	16
48	Fruit, vegetables	1	19	19	11
49	Other crops	1	20	15	22
50	Fertilisers	1	5	1	8
51	Ceramics, bricks	1	12	13	9
58	Motor transport	1	4	7	6
68	Insecticides, etc.	1	6	3	15
73	Railways	1	10	10	56
74	Electricity	1	9	11	45
34	Cotton yarn	20	3	6	47
54	Timber	20	23	20	23
56	Wood (others)	20	22	24	24
57	Other forest products	20	30	27	20
60	Crude oil	20	21	22	51

TABLE III (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)
59	Petroleum products	25	51	51	49
53	Wood products	26	34	36	39
3	Non-electrical equipment	27	44	59	48
9	Non-ferrous metals	27	47	47	32
10	Other minerals	27	28	26	58
11	Rubber	27	70	70	73
12	Leather	27	50	49	65
13	Other leather products	27	24	31	43
14	Leather footwear	27	35	34	40
15	Animal husbandry	27	38	45	28
17	Sugar	27	66	67	70
20	Vegetable oils	27	31	2	54
21	Vanaspati	27	46	46	50
22	Salt	27	33	32	14
23	Starch	27	67	66	35
24	Milk products	27	56	60	12
25	Breweries, etc.	27	42	39	12
30	Fruit & vegetable preservation	27	61	57	2
37	Jute textiles	27	60	61	29
38	Woollen yarn	27	40	41	18
40	Raw silk	27	48	50	25
42	Man-made fibres	27	41	35	71
45	Oil-seeds	27	29	29	52
47	Tobacco	27	25	25	19
52	Glass and glassware	27	32	33	11
55	Chinaware and pottery	27	45	44	7
63	Other rubber products	27	26	28	64
65	Plastics	27	43	42	67
67	Paints, etc.	27	49	48	59
70	Soap and glycerine	27	54	54	46

TABLE III (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)
75	Coal and coke	27	27	30	57
4	Transport equipment	56	39	40	69
6	Iron and steel	56	58	56	53
66	Dyestuffs	58	36	38	55
5	Metal products	59	52	52	52
33	Cotton	60	37	37	42
72	Miscellaneous chemicals	60	69	68	61
27	Cigarettes, etc.	62	62	62	26
29	Other tobacco products	62	64	64	38
69	Drugs, etc.	62	53	53	74
2	Electrical equipment	65	59	43	31
61	Rubber footwear	66	57	58	63
62	Tyres and tubes	66	55	55	62
64	Paper and paper products	68	68	67	30
39	Woollen textiles	69	63	63	72
43	Artificial silk fabrics	70	71	71	68
35	Cotton textiles	71	73	73	27
44	Other textiles	71	65	69	33
31	Cashewnut processing	73	74	74	10
41	Silk textiles	74	72	72	66
71	Perfumes, etc.	75	75	75	75

^aFor the definitions of these measures, see Table I, especially footnotes *a* and *c*.

(Contd. on next page)

TABLE IV

RANKS OF DIFFERENT INDUSTRIES ACCORDING TO THE
DEGREE OF PROTECTION UNDER ALTERNATIVE
MEASURES, BRAZIL, 1966

<i>Industry</i>		<i>Nominal tariff</i>	<i>Effective tariff^a</i>		
<i>No.</i>	<i>Name</i>		<i>Measure 1</i>	<i>Measure 2</i>	<i>Measure 3</i>
(1)	(2)	(3)	(4)	(5)	(6)
1	Crops, etc.	1	6	6	6
2	Livestock, etc.	1	2	2	5
3	Electric energy	1	3	3	2
4	Commerce	1	5	5	3
5	Services	1	4	4	4
31	Construction	1	1	1	1
32	Transport	1	9	9	8
12	(Other) Machinery	8	12	7	7
21	Pharmaceuticals	9	8	11	8
9	Extractive industries	10	11	8	11
11	Metallurgy	11	9	9	10
20	Chemicals	12	13	13	13
10	Non-metallic minerals	13	7	12	12
30	Miscellaneous	14	15	15	17
17	Paper and paper products	15	14	14	14
15	Wood products	16	20	20	21
14	Transport equipment	17	17	17	18
18	Rubber products	18	19	19	20
19	Leather products	19	16	16	15
13	Electrical equipment	20	23	22	23
23	Plastics	21	22	23	22
29	Printing and publishing	21	18	18	19
16	Furniture	23	24	24	24
26	Food products	24	29	29	28
22	Perfumes, soaps, etc.	25	28	27	27
24	Textiles	26	25	25	25
27	Beverages	26	21	21	16
25	Clothing	28	26	26	26
28	Tobacco	29	27	28	29

^aFor the definitions of these measures, see Table II, footnotes *a* and *c*. As the effective tariffs could not be computed for the three dummy sectors, 6, 7 and 8, the same were omitted from the rank list.

TABLE V
NET TARIFF BENEFITING THE PRODUCERS,
INDIA 1965-66, BRAZIL 1966^a

<i>Brazil</i>		<i>India</i>	
<i>Industry No.</i>	<i>t*_j</i>	<i>Industry No.</i>	<i>t*_j</i>
1	— .18	11	.2347
		18	— .1555
		32	— .0056
		33	.3490
		36	— .0587
		40	.2424
		45	.2127
		46	— .0061
		47	.2440
		48	— .0050
		49	— .0016
		57	— .2339
		Average	.0680
2	— .15	15	.2250
3	— .15	74	— .0565
4	— .10	Average	.0748
5	— .36	Average	.0748
6	— .67	81, 85	.1012
8	— .95	Computed ^b	.2300
7	.21	59	.1280
		60	.0700
		Average	.0990
9	.18	7	— .0093
		9	.1609
		Average	.0851
10	.40	10	.2424
		75	.0000
		Average	.1212
11	.09	5	.2650
		6	.1891
		Average	.2271
12	— .02	3	.1761
13	.53	2	.3645
14	.35	4	.1640

TABLE V (Contd.)

<i>Brazil</i>		<i>India</i>	
<i>Industry No.</i>	<i>t*</i> _j	<i>Industry No.</i>	<i>t*</i> _j
15	— .30	53	.1965
16	.54	54	— .0686
Average	.12	56	— .0872
		Average	— .0325
17	.23	64	.5746
18	.43	61	.3548
		62	.3470
		63	.1130
		Average	.2716
19	— .42	12	.1441
		13	.1942
		14	.0072
		Average	.1152
20	.17	50	— .0941
		66	.1858
		67	.1603
		68	0.0000
		72	.2563
		Average	.1017
21	.14	69	.3719
22	1.52	70	.1273
		71	— .9557
		Average	— .1522
23	.58	65	.1385
24	1.05	34	— .0636
25	1.04	35	.8030
Average	1.04	37	— .3045
		38	.1305
		39	.6919
		41	.8458
		42	.1590
		43	.7421
		44	.7591
		Average	.3763
26	1.10	16	— .0042
		17	— .1192
		20	.0830

TABLE V (Contd.)

Brazil		India	
Industry No.	t^*_j	Industry No.	t^*_j
		21	.2353
		22	.2253
		23	.2365
		24	.1203
		26	— .1004
		30	.1804
		31	.8280
		Average	.1685
27	1.51	25	.1597
28	1.47	27	.2303
		28	— .0419
		29	.2900
		Average	.1595
29	.51	77	— .1407
30	.37	8	— .0797
		19	— .0025
		51	— .0349
		52	.1405
		55	.2066
		Others	— .0000
		Average	.0383
31	— .46	1	— .0488
32	— .56	58	— .0939
		73	— .0710
		Average	— .0825
OVERALL SIMPLE AVERAGE	.2531	OVERALL SIMPLE AVERAGE	.1412

^aThe input-output table of India contains 77 sectors (plus several miscellaneous dummy sectors) of which only 75 have been analysed here; while the available input-output table of Brazil consists of 32 sectors (including 3 dummy sectors) only. Hence, the two classifications were matched according to the best judgment of the author. When multiplied by 100, the figures of this table give present tariff rates.

^bSince this item contains repairs and depreciation for India, and depreciation and residual expenses for the corresponding sectors of Brazil, the "computed" tax burden for India is an average of the electrical and non-electrical machinery and miscellaneous industries. For Brazil, see the footnotes to Table II.

TABLE VI

REGRESSIONS OF THE VARIABLES OF INDUSTRIAL EXPANSION
ON NOMINAL AND EFFECTIVE TARIFFS^a

INDIA					
1.	$\Delta Q/Q$	=	32.97	+	365.30 t, $r^2 = .0506$, d.f. = 26 (1.17)
2.	$\Delta Q/Q$	=	127.33	—	.24 τ_1 , $r^2 = .0234$, d.f. = 26 (— .79)
3.	$\Delta Q/Q$	=	122.6	—	.26 τ_2 , $r^2 = .0160$, d.f. = 26 (— .65)
4.	$\Delta Q/Q$	=	1960.0	—	2292.0 t, $r^2 = .0485$, d.f. = 73 (—1.93)
5.	$\Delta Q/Q$	=	1530.7	—	1.48 τ_1 , $r^2 = .0232$, d.f. = 73 (—1.31)
6.	$\Delta Q/Q$	=	1456.9	—	1.78 τ_2 , $r^2 = .0127$, d.f. = 73 (—0.97)
7.	D/VA	=	.0356	—	.02 t, $r^2 = .0292$, d.f. = 73 (—1.48)
8.	D/VA	=	.0311	—	.00001 τ_1 , $r^2 = .0131$, d.f. = 73 (— .98)
9.	D/VA	=	.0298	—	.000006 τ_2 , $r^2 = .0009$, d.f. = 73 (— .25)
10.	S_1	=	1.6968	—	5.36 t, $r^2 = .0221$, d.f. = 24 (— .73)
11.	S_1	=	.7305	—	.02 τ_1 , $r^2 = .0332$, d.f. = 24 (— .90)
12.	S_2	=	1.0552	—	.01 t, $r^2 = .0036$, d.f. = 24 (— .29)
13.	S_2	=	1.0524	—	.000005 τ_1 , $r^2 = .00007$, d.f. = 24 (— .04)
14.	S_3	=	1.2874	—	.0615 t, $r^2 = .0049$, d.f. = 24 (— .35)
15.	S_3	=	.02656	+	.0002 τ_1 , $r^2 = .0050$, d.f. = 24 (.34)
16.	S_4	=	.007625	+	.0052 t, $r^2 = .018$, d.f. = 24 (.23)
17.	S_4	=	.4305	+	.0068 τ_1 , $r^2 = .0432$, d.f. = 24 (.41)

The r between t and τ_1 = .4934 and t and τ_2 = .6163 with 73 d.f.

TABLE VI (Contd.)

BRAZIL (17 degrees of freedom)

18.	$\Delta Q/Q$	=	1.32	—	.035 t	±	3.17, $r^2 = .1532$
					(— .15)		
19.	$\Delta L/\Delta Q$	=	.928	—	1.471 t	±	4.833, $r^2 = .0309$
					(— .73)		
20.	L/VA	=	.0016	+	.00023 t	±	.001, $r^2 = .0161$
					(.53)		
21.	W/VA	=	.373	—	.0111 t	±	.093, $r^2 = .0048$
					(.038)		
22.	S_1	=	104670.0	—	802.96 t	±	5816.6, $r^2 = .0065$
					(— .33)		
23.	S_2	=	122444.0	—	69.64 t	±	9249.6, $r^2 = .1737$
					(— 1.94)		
24.	S_4	=	312.67	—	16.5 t	±	117.8, $r^2 = .0038$
					(— .25)		
25.	$\Delta Q/Q$	=	.357	—	.0134 τ_1	±	4.18, $r^2 = .1053$
					(— .27)		
26.	$\Delta L/\Delta Q$	=	— .53	—	.0014 τ_1	±	4.88, $r^2 = .0120$
					(— .47)		
27.	L/VA	=	.0019	—	.0000003 τ_1	±	.001, $r^2 = .0082$
					(— .37)		
28.	W/VA	=	.37	—	.00007 τ_1	±	.0875, $r^2 = .0875$
					(— 1.28)		
29.	S_1	=	103740.0	+	.026 τ_1	±	5835.7, $r^2 = .00000$
					(.007)		
30.	S_2	=	115161.0	—	3.51 τ_1	±	10098.0, $r^2 = .0150$
					(— 0.52)		
31.	S_4	=	341.3	+	.0025 τ_1	±	98.7, $r^2 = .00001$
					(.38)		

The r between t and $\tau_1 = .6247$

* The first term on the RHS of the equations is the intercept of the regression, the second term is the regression coefficient and the third term (in the case of Brazil only) is the standard error of estimate.

The symbols stand for the following:

$\Delta Q/Q$ = A measure of the increase of output (Q). The increase of output for the first three regressions for India is the one in 1964-65 over

1959, that for regressions 3-6 for the projected output of 1970 (as in the input-output table) over that in 1964-65. For Brazil, this output increase is for the year 1960 over that in 1950.

D=Depreciation as per cent of value added, used as a measure of the intensity of capital.

S_1 =Scale economies. For India, as computed by Diwan [1967], Table 7A, Model III. For Brazil, as computed by Rocca [1967], Table 15.

S_2 =Scale economies as computed by Yeong-Her Yeh [1967], Table 3, last but one column.

S_3 =Scale economies as computed by Yeong-Her Yeh [1967], Table 3, last column.

S_4 =Scale economies S_2 for India and S_1 for Brazil relative to the corresponding measures in the US, the latter as computed by Liu and Hildebrand [1965], Table 4.

t =Nominal tax rates.

τ_1 =Effective tax rates of Measure 1.

τ_2 =Effective tax rates of Measure 2.

L/Q =Labour input (L) as per cent of output (Q) used as an index of labour intensity.

W/VA =Wage cost (W) as per cent of value added (VA); used as a second index of labour intensity.

r =Simple correlation coefficient and r^2 its square.

d. f.=Degrees of freedom.

Sources of data: Input-Output Tables for Brazil and India, Tables I and II of this study, and the sources cited in the footnote above.

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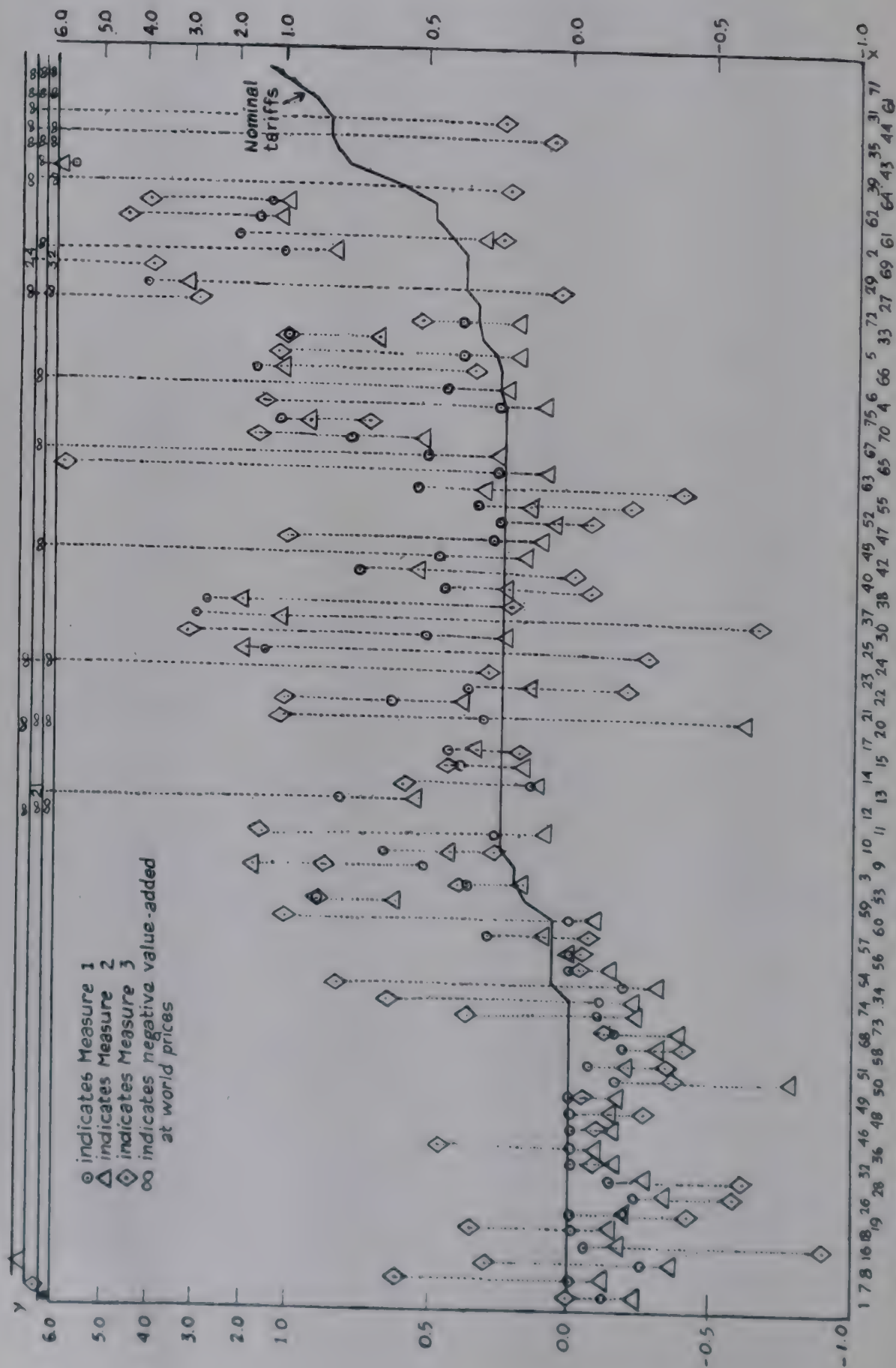


Fig. 1.—Nominal tariffs and effective tariffs under alternative measures. (The y-axis indicates the tariff rates; the x-axis shows the industry code numbers ranked in accordance with nominal tariffs.)

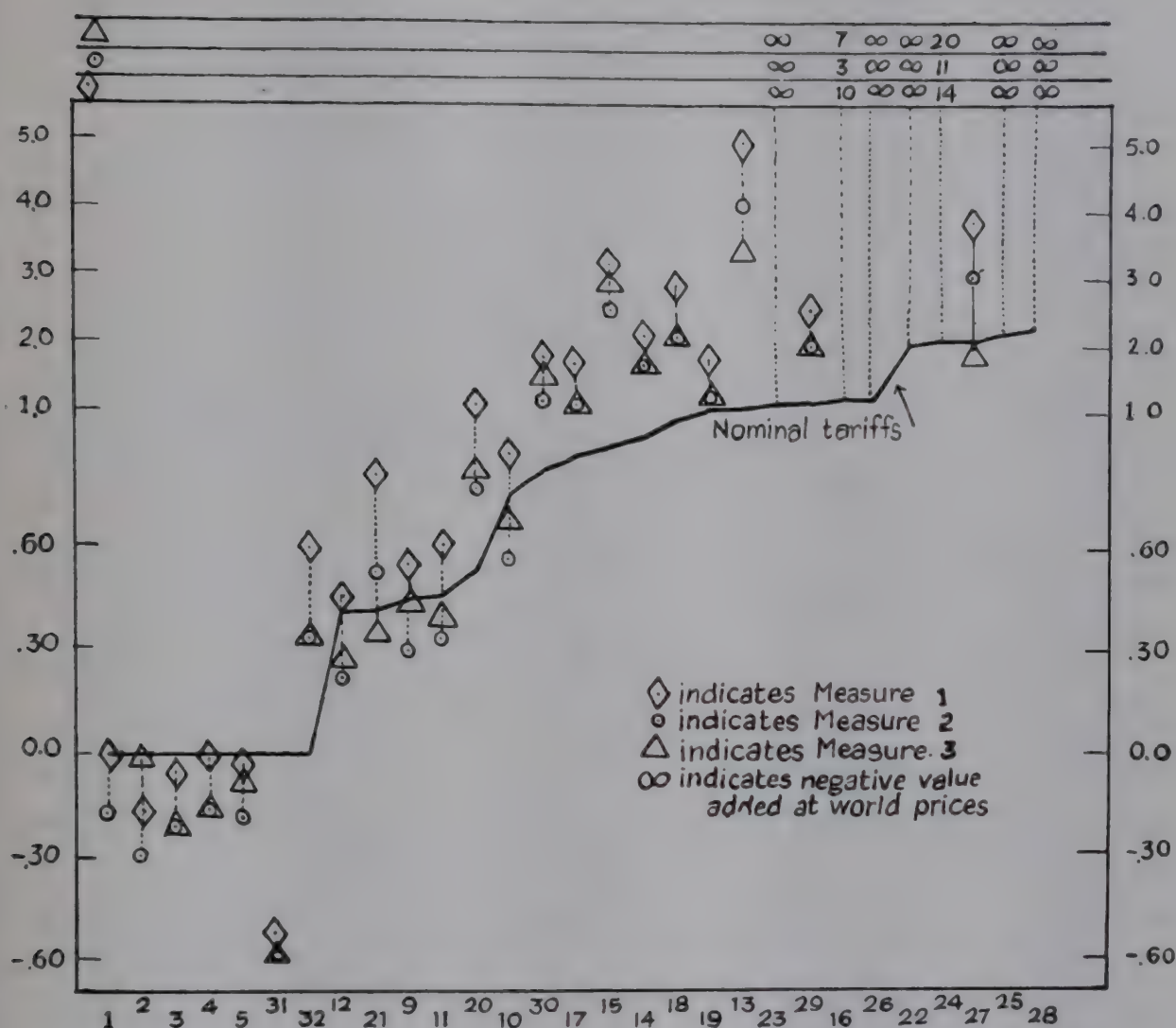


Fig. 2.—Nominal tariffs and effective tariffs under alternative measures. (The y-axis indicates the tariff rates; the x-axis shows the industry code numbers ranked in accordance with nominal tariffs.)

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SHIPOWNERS' PROBLEMS AT THE PORT OF BOMBAY*

THE problems of shipowners with reference to the port of Bombay are numerous and divergent in character. The possible lines of solution of these problems would necessarily fall into long-term and short-term categories depending upon the nature of the individual problems. However, the major problem of the slow turn-round of ships emanates from both the berthing delays and unproductive detention of ships at berths. The berthing delays for the ships experienced at the port would call for long-term remedies whereas the unproductive detention of vessels at berths can be got over by a series of short-term measures. Therefore, long-term as well as short-term measures assume equal importance.

ANATOMY OF THE PROBLEM

During the four-year period, 1962-63 to 1965-66, various categories of ships calling at this port lost over 12,700 days, and the loss to their owners in terms of standing charges at an average rate of Rs 8,000 to Rs 10,000 might have been over Rs 12 crores, out of which loss to the general cargo interests might have been of the order of Rs 10 crores. For the year 1966-67, the total loss suffered as a consequence of berthing delays by the owners of all categories of vessels could be put at Rs 6.3 crores (post-devaluation), out of which the share of the owners of general cargo ships could be estimated at Rs 2.7 crores. Over and above this, the adverse effects of lower efficiency of shipping services and loss of trading opportunities, which cannot be easily computed in money terms, have also to be taken into account.

There is no denying the fact that the increasing pressure of traffic handled at Bombay port has been the basic reason contributing to the slow turn-round of vessels. The traffic as a whole at the port has almost trebled since 1950-51, although the dry cargo traffic, which increased from 4.90 million tonnes in 1950-51 to 8.3 million tonnes, has not registered an increase to the same extent. In fact, it is less than double the figure of 1950-51. The number

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of vessels calling at the port has steadily increased and the slow declining trend seen after 1962-63 is compensated by the increase in the size of the individual vessels. In contrast, the berthing capacity of the port has remained almost static for handling of dry cargo ships since the coming into operation of the Alexandra Dock in 1914.

The port has added a few major items in its imports like POL, foodgrains, fertilisers and heavy machinery in the post-War period. In terms of volume, the POL and foodgrains traffic are the most significant. The handling of POL traffic is done at the specially created Marine Oil Terminal, but foodgrains are handled mostly in the Alexandra Dock. There is a strong feeling among the overseas shipping interests at Bombay that the excessive berthing delay suffered by general cargo ships at the port is on account of the pressure of foodgrains traffic on the Alexandra Dock and the inadequate mode of its handling.

Thus, the problems faced by the shipowners have not suddenly cropped up. They have been accumulating over a period of time. A right port policy enables the port authorities to think ahead and to keep the port in a state of preparedness to face them. What has happened with regard to Bombay and most of the ports of India is that the problems have been perpetually running ahead and have more than overtaken the policy-makers, who have been forced to resort to *ad hoc* actions while taking into account the long-term measures. To meet the obvious shortage of berthing facilities at the port of Bombay, in the face of mounting volume of trade, the expansion in its berthing capacity was urgently needed. The Dock Expansion Scheme, which was to have been taken up in 1962, is only now under execution and is expected to be completed by 1970. It is interesting to note that it is since 1962 that the problem of detention of vessels at the port has been particularly aggravated. Even with the completion of the scheme, not much relief can be expected for the shipping lines in terms of available berthing facilities, because by then the traffic at the port would have grown further to keep up the pressure.

The available port facilities should not only be adequate for meeting the normal requirements of the traffic but should have sufficient reserve to take good care of the peak-period rush of traffic. Besides, the question of gradually building up additional reserve capacity of the port for improving the future needs of trade and shipping has to be tackled separately. The resourcefulness of the port management and the efficiency of port as a whole can best be judged by the manner and extent to which the requirement of the peak-period traffic is met. There is hardly any pragmatic wisdom

in drawing satisfaction from the performance of the port with regard to turn-round of ships, loading and discharge rates, labour output, etc., on the basis of annual aggregative averages. The average detention of ships at the port during 1966-67 was about 5 days, but the detention was as much as 20 to 25 days, and in some cases over 30 days, during the peak-period of traffic. While the port authorities draw satisfaction from the former, the users of the port are more concerned over the latter. This gap has to be bridged.

LONG-TERM MEASURES

Development of the Satellite Port at Nhava Sheva

The shipping interests are of the view that the increasing volume of traffic at the port would make the existing facilities, including additional berths under construction, inadequate in about ten years' time. This is very largely supported by the projection of traffic potential for the port covering a period of 10 to 15 years. Therefore, unless the Master Plan envisaging a satellite port at Nhava Sheva across the Bombay Harbour is implemented, a long-term solution to the problems of the port would not be in sight. It is felt that the Master Plan is still in the melting pot and not much progress has been made in its implementation. Consequently, it is apprehended that the problems at this port will assume serious proportions and shipping lines would not be in a position to expect relief in the foreseeable future.

On the basis of its locational advantage and the facilities available to the trade, the port has great scope for attracting transit traffic. This has not been done so far, because the port has been merely struggling to match the limited port facilities with its regular volume of trade rising at a fairly high rate. It would be easy to plan in advance at Nhava Sheva the necessary facilities in terms of berths, transit sheds and warehousing space, specially for attracting and handling of transit traffic. In all discussions about the Master Plan for development of a satellite port at Nhava Sheva, this aspect does not seem to have been taken into account. From the point of view of the port revenue as well as its development, facilities for transit traffic are very important and should be kept in view in the Master Plan for the port.

Syphoning of the Traffic in Thana/Kalyan Creek

The clearance of goods from the port area among other factors also depends on the capacity of roads and trunk railways. As it is, there is heavy congestion on the city roads, and the terminal points of the Western and the Central Railways are heavily congested. The

situation is already bad and is likely to deteriorate with the increase in traffic at the port. The congestion of traffic outside the port area adversely affects the clearance of goods from the port leading to slow turn-round of ships, heavy demurrage charges and higher freight rates. Therefore, there is an urgent need to syphon a part of the port traffic by diverting it to the Thana/Kalyan Creek with the help of flat bottom barges. Thana and Kalyan can be developed as barge ports by providing the necessary landing facilities by the Bombay Port Trust. The reported move for linking the Western and the Central Railways at some suitable point in the northern part of the island, much outside the busy area of the city, also augurs well for the success of the scheme. The port authorities and other concerned interests should pursue this idea with a view to bringing relief from the pressure of traffic at the port as well as in the city. If the idea is vigorously pursued, the scheme can be implemented in a relatively short period.

SHORT-TERM MEASURES

Handling of Foodgrains

Our imports of foodgrains have generally been increasing. In recent years, the rise has been rather steep and a substantial burden—almost 1/3rd—of this traffic has fallen on the port of Bombay. Obviously, this is rather a big burden for a busy port like Bombay. It is the contention of shipping interests at Bombay that the performance of foodgrains vessels in terms of discharge and clearance has been highly inadequate particularly after the introduction of departmental handling. The output per day per ship on an average is of the order of 2,500 tonnes only as against over 3,000 tonnes when the operations were in private hands. This has necessitated the allotment of four berths as against three for the food ships. Even the allotment of four berths is only “statistical”, because quite often four vessels would occupy 5-5½ berths on account of their length. Besides, the fertiliser ships occupy two berths. Consequently, as many as eight berths are utilised by the food and fertiliser vessels, leaving only nine berths for general cargo ships in the Alexandra Dock. Taking the capacity of a berth to handle five general cargo ships per month, about 40 vessels would be denied the berthing opportunities every month on account of the loss of these eight berths. This is considered as a major contributory factor for the slow turn-round of general cargo ships with inevitable loss to the interests concerned. There is considerable force in this reasoning. No one would like to take the extreme position that the port should be kept completely free from the import of foodgrains. But it does emphasise the urgent need for easing the pressure of

the foodgrains traffic at this port particularly when other ports are in a position to handle more traffic than what they have done so far with the provision of additional handling equipment and improvement in port conditions.

Lighterage Facilities

For meeting the shortage of berths at the port, the effective short-term remedy is to encourage loading and discharging of cargoes in the stream by providing adequate lighterage facilities with convenient off-loading points. At present, only a few foreign shipping lines, and particularly the American President Line, resort to this method at exorbitant costs, because its vessels are not detained at ports for more than 72 hours. Other shipping lines are not inclined to do so on account of heavy cost and detention suffered by lighters and barges for want of suitable off-loading points. If the port authorities can go in for their own lighters and barges to be offered at reasonable hire charges on a regular basis with sufficient off-loading points, much relief would come to ships suffering heavy detention at the port. Besides, it would not involve any expenditure in foreign exchange, for many shipyards in the country are willing to undertake the construction of wooden or steel barges of 300/400-tonne capacity. Thus, the encouragement of the working of the ships in stream would facilitate the task of port authorities in implementing the aforementioned suggestion for syphoning a part of the traffic *via* the Thana/Kalyan Creek.

Detention of Vessels at Berths

The unproductive detention of vessels at berths, apart from causing harm to the shipping interests, reduces the capacity of berths for handling the number of vessels. The slow turn-round of vessels does not permit intensive use of the available berthing capacity of this port. The high berth occupancy at the port cannot be a matter of satisfaction in view of the longer unproductive detention of vessels at berths demonstrated by the illustrative data with regard to the three Indian Shipping Companies given in this study. As a matter of fact, in many cases it actually means wastage of berthing capacity. The causes responsible for this can be grouped under four broad categories, viz., (a) deficiency of handling equipment, (b) shed management, (c) slow clearance of cargo, and (d) labour disputes.

Deficiency of Handling Equipment

According to shipping interests, on an average, 30 per cent of the mechanical gear is found to be out of order. It has been

estimated that the delays caused by the breakdown of cranes and extra time taken in shifting them accounted for 15 per cent to 25 per cent of the ship-days lost at this port. The hydraulic cranes in the Prince's and Victoria Docks have become the relics of the past and appear to have lost all practical utility. Only two heavy lift floating cranes are available for the handling of the heavy equipments. One of them being old needs early replacement. On occasions, when both of them go out of commission, considerable inconvenience is caused to the working of ships.

Shed Management

A shed is only a transit depot between the quay and the warehouse, and as such the efficiency of shed management is judged by the speed with which the cargo is kept moving. Given the loading and unloading rates, the detention of vessels depends on how quickly the cargo is moved in and out of transit sheds. For want of proper stacking of cargo, many sheds at the port bear the appearance of godowns cluttered up by indiscriminate piling up of cargo.

This presents considerable difficulty in locating the cargo and its ultimate clearance by the consignees. The limited shed space is also wasted in this manner and the resulting congestion adversely affects the discharge of cargo from ships. The shipping interests contend that Port Trust's tallies are hardly reliable and in a number of cases they showed more units of cargo having been received than shown by the ship's manifest, but delivered less or equal to the number of units mentioned in the latter. This has caused considerable inconvenience to shipping lines as claims have to be paid against apparent shortages and refund could not be obtained until port outturns had been finalised.

For quick clearance of cargo from the sheds, its identification has to be effortless. Very often the shed staff takes resort to the traditional method of marking the ships' names as a matter of routine than one of carefully performed duty. The markings thus given get obliterated in the process of further handling operations, making the identification of cargo very difficult and often impossible. Besides, the stacking of cargo is not done vessel-wise and the cargoes discharged by the subsequent ships get mixed up with the cargoes already lying in the shed. As a matter of fact, in a busy port like this, where the vessels at the berths are expected to come one after the other in quick succession, the arrangement of stacking the cargo should be not only vessel-wise but also consignment-wise.

The existing set-up and method of shed management served the purpose in the past when the pressure of traffic was relatively light. Today, the mounting pressure of traffic demands a more

intensive utilisation of existing port facilities. This requires a different type of shed organisation and management. One of the ideas worth trying is a pattern of management under which each shed and berth is separately managed as an independent unit by a shed manager. He should be responsible for efficiency and accuracy of tallying, stacking, security, proper handling of cargo, cleanliness in the jetty and in the shed, availability of fork lifts and other equipment, clearance and movement of cargo to warehouses, etc. Besides, he should be responsible for the overall output and turn-round of a ship. In order that he can shoulder his responsibilities well, he should have self-sufficient complement of staff consisting of a representative of customs, a technical man for minor repairs, a complement of forklifts, crane drivers, tally clerks, labour, shift gangs, etc. In other words, he should be provided with whatever is necessary to carry out the normal duties and provide normal facilities to vessels at a berth, so that the shed is able to function as an independent unit. For optimum level of efficiency, suitable norms of operations will have to be evolved. Much of the inertia and lethargy in the shed prevailing at the moment can be eradicated with the introduction of suitable incentives and the provision of adequate opportunities for promotion in higher cadre for the shed staff. Besides, healthy competition should be generated among the working of different sheds and better performance should be rewarded by special bonus for the staff. In this context, the need for training and proper orientation of shed managers and other supervisory staff cannot be overemphasised. To further strengthen the shed management on unit basis, there is need for a high level official like Joint General Manager (Docks) whose primary duty will be to quicken the pace of discharge of every ship and to accelerate the speed of clearance by chasing all concerned and making himself freely available to shipping and trade interests at all times. The shipowners strongly feel that the appointment of a high level official will save ships' time and increase berth capacity by 15 per cent to 20 per cent.

SLOW CLEARANCE

Tardy Functioning of the Customs Department

According to the port authorities, a random selection of vessel's cargoes shows that barely 40 per cent is cleared within 10 days after the completion of discharge of the ship and it is quite common to find that even six months after the ship's departure from the port, several consignments remain uncleared. This state of affairs is on account of several reasons and most of them are attributable to slow customs procedures. Some of the consignments are confiscated by the Customs outright or provisionally, pending release on the consignees paying the imposed fine. Many of them may be

awaiting completion of the formalities for examination and appraisal by Customs. Consequently, these goods lie in the port premises in the absence of any arrangement made by the Customs for their storage elsewhere. The position in this respect during December 1967 was that as many as 21,000 packages were lying at the port, of which over 20,000 were confiscated outright and the remaining were awaiting completion of investigation by the Special Investigation Branch of the Customs. Besides, over 70,000 packages were lying uncleared awaiting release by the Customs. Over and above the Customs and import trade (control) formalities, lack of adequate and timely supply of railway wagons and bottlenecks in road transport have been also responsible for the slow clearance of cargo. It has been represented by shipping and trade interests as also by the port authorities that the existing procedures of Customs, its organisational set-up and practices and the manner of enforcing the provisions of the Sea Customs Act, constitute a major impediment to the expeditious clearance of cargo from the port premises. For expediting Customs clearance, a few measures such as prior entry rules, system of Note & Pass for Government Cargo and the Dock Appraising Scheme have been introduced. These have mostly served as palliatives and have failed to bring about visible improvements in the situation. It is the considered opinion of the trade interests that unless there is a radical change in the procedures of the Customs, no fundamental reform in its operations and methods of working can take place. In collecting revenue, the Customs are stated to become a barrier in the flow of goods. There has to be a positive method of collecting the revenue. After all, with the increase in the flow of trade the revenue of the Customs also increases. An atmosphere vitiated by suspicion is hardly conducive to the healthy functioning of the Customs Department. The tendency to err more and more on the safer side suspends the exercise of legitimate judgement, which would otherwise be more helpful in enforcing the provisions of the law without causing harassment, inconvenience and delay to the interests concerned. While the need for effective enforcement of the provisions of the law, requirements of various controls and reasonable safeguard of the revenue to be collected by the Customs is recognised, there has to be a definite orientation to the servicing of trade. There is a very clear necessity of having a servicing department functioning on a regular basis. Such a department, apart from serving as a source of ready reference and consultations for importers and exporters or their clearing agents for filling the necessary requirements, must also help the trade in the preparation of various documents with required details so as to avoid frequent back references.

As it is, both the Port and the Customs authorities are functioning in water-tight compartments. There is a positive need

for generating active coordination in the functioning of the two. This can be realised by thrashing out the problems inhibiting such coordination. It is high time that the Port and Customs authorities should clearly demarcate their areas of operation and responsibilities particularly in respect of disputed and confiscated cargo lying in the port warehouses.

Shipping as well as trade interests have also been representing from time to time that the existing warehousing facilities for import as well as export traffic are very inadequate. Consequently, transit sheds remain congested and assembling of export cargo becomes difficult and both these factors hold up the despatch of vessels. There is an obvious need for providing sufficient warehousing space at this port, particularly, when it is noted that the warehousing space available at the port of Calcutta is 473,000 sq. metres as against 73,000 sq. metres at Bombay though the traffic handled at the former is only half of the traffic handled at Bombay.

Labour Disputes

Port facilities are essential services from the view-point of trade as well as the national economy and the standard of labour discipline has to be of the highest order. Frequent labour strikes and stoppages of work continue to hamper the smooth operation of our ports and the port of Bombay is not an exception. In 1966-67, there were 24 strikes of varying duration at the port. Inter-union rivalry among port labour frequently disturbs the industrial peace and worsens industrial relations. The introduction of piece rate system has improved the level of labour productivity, but the fast working and careless handling has resulted in considerable damage to cargo. Absenteeism of labour, shortage of labour gangs particularly for the third shift, late commencement of work of the individual shifts, etc., dislocate the port operations and arrangements of shipping and trade interests.

It is unfortunate that the continuous pressure of traffic and perpetual labour troubles have affected the morale of the port management so much that it is not prepared to undertake even the traditionally recognised methods of port operations such as the provision of lighters and barges for enabling ships to work in stream. Under the circumstances, there is urgent need for boosting the morale of port authorities for infusing dynamism in the operations of the port. This can be accomplished by increasing the autonomy of the port and compelling the port labour to resort to constitutional remedies for the redress of their grievances rather than to strikes by declaring port operations as essential services.

LIMITATIONS IN THE FUNCTIONING OF THE PORT AUTHORITIES

The successful implementation of the decisions of the Board of Trustees of the port will largely depend on the active help of the participating interests and on support to the Port Trust's proposals when processed in their respective organisations. This very legitimate expectation has not always been adequately realised. Sufficient powers are not delegated to General Managers and other officers of the Trunk Railways to deal with matters like terminal charges payable by these Railways and settlement of charges for wagon repairs. If necessary powers are delegated to them by the Railway Board to take final decisions on such matters, they could be effectively helpful and protracted correspondence can be avoided. In the same manner, the Collectors of Customs should be empowered to take decisions on the spot on various matters such as removal of confiscated cargo from the docks to warehouses rented by or constructed by the Customs outside the port, disposal of confiscated cargo and sanctioning auction sales of uncleared cargo. Representatives of State Government also need to be more helpful for expediting the process of acquisition of land by the Port Trust. Some of the acquisition proceedings initiated years ago have not yet been completed. Cooperation of the representatives of Municipal Corporation has not been forthcoming actively in the matter of provision of adequate water supply at the Docks and sometimes commercial shipping is very much handicapped on account of inadequate supply. Slums have developed in the vicinity of the port area for want of slum clearance campaigns. This leads to insanitation and harbouring of undesirable elements which would indulge in pilferage.

The Port Trust is supposed to enjoy the status of an autonomous corporation but, in fact, its autonomy is limited. The Major Port Trust Act, which governs the operation of Kandla, Marmugoa, Cochin, Visakhapatnam and Paradeep, provides some flexibility with regard to the financial limits up to which the Port Trusts are empowered to take decisions on various matters like sanctioning of plans and estimates of works, and placing of contracts. These limits are much higher than in the case of older ports like Bombay, Calcutta and Madras. These limits need an upward revision and for that purpose the respective Port Trust Acts require suitable amendments. There will still remain a category of sanctions beyond this limit which will be within the competence of the Central Government. Therefore, it is very necessary that the proposals of the Port Trusts are processed and finalised expeditiously by the Central Government and decisions in that regard are communicated promptly to the Port Trust/s concerned. It is suggested by the port authorities that in respect of projects like the dock expansion and modernisation schemes, where foreign exchange has

been provided by the World Bank and its affiliates requiring quick utilisation, a separate cell may be created in the Ministry of Transport. This suggestion is worth pursuing, because this would obviate considerable delays caused in the Secretariat of the Ministry in processing the references further with the World Bank or taking decisions and conveying them to the port.

HANDLING OF HAZARDOUS CARGO

It has been represented by the shipping interests that the landing of hazardous cargo being a specialised job is usually carried out by contractors virtually without the supervision of the port authorities. When such cargo is discharged from the lighters, it is left to the contractors to look after the cargo until delivery is taken by the consignees. No effective supervision is provided for such cargo by the port authorities. During the monsoon season, there are serious complications in the off-loading of such cargo prior to proceeding of vessels into the port area, resulting in delays. The shipping lines have suggested that the port authorities should set aside an area within the harbour for (a) direct discharge of certain highly dangerous/hazardous cargo meant for Bombay, and (b) discharge into lighters of transit hazardous cargo. Besides, the absence of uniform hazardous cargo regulations for all Indian ports has been causing considerable inconvenience to the shipping lines and trade interests.

LOCK GATE

As a safeguard against the eventuality of the lock gates going out of order, as has happened in the past and also more recently, the idea of having a spare lock gate is a sound one. It seems to have been given up by the port authorities on account of the reported difference of opinion with the Ministry of Transport. Whatever might be the reason, it is most essential for a port of the magnitude of Bombay to have spare lock gates in the larger national interests and not to expose itself to the risk of becoming a tidal port with considerable delays to shipping.

DRY DOCKING FACILITIES

Shipping interests have been experiencing considerable delays to ships needing repairs. In majority of the cases, repairs have to be postponed and eventually carried out at foreign ports with considerable loss of foreign exchange. Excepting the Mazagaon Dock of Bombay, no other ship repair yard has dry docking facilities and consequently the use of Bombay Port Trust's dry docks becomes necessary. With the inevitable priority for dry docking facilities

being accorded to Port's craft and naval vessels, prolonged delays are bound to occur in executing repairs to merchant ships. In the midst of this situation, it may appear surprising that the Hughes Dry Dock also remains idle on account of the fact that the shipowners would not wait for the facilities for days together without a firm date of availability. The shipping interests have represented that the port authorities should consider acquiring at least two floating dry docks immediately to meet the situation. In view of the lack of availability of repair berths, it has been suggested by shipowners that at least two berths, one in the Alexandra Dock and the other in the Prince's and Victoria Docks, should be made available for carrying out repairs to ships.

TRUSTEES VERSUS BAILEES

Considering the amount of wastage of goods in the port area, damage in handling and pilferage of cargoes, the port authorities shall have to shoulder greater responsibilities in the overall national interest than what is demanded of them as mere "bailees". After all, the port is administered by Trustees who should act as real custodian of the goods and property under their charge by exercising all possible cares expected of them not as "bailees" but as "*trustees*". In order that the port authorities are in a position to shoulder added responsibilities, they should be armed with more powers by a suitable amendment of the Port Trust Act.

ALLOTMENT OF BERTHS AND THE REGISTRATION SYSTEM

The ships required to wait for berths are allowed to go to nearby ports for loading and discharging of cargo after registering their numbers in the queue. This, of course, leads to profitable utilisation of idle time of the ships waiting for berths. Shipping interests have represented that often the time indicated for the return of the ship and the allotment of berth is not accurate. Quite often, the berths fall vacant earlier than expected and allotted to other ships. In such cases, more waiting is involved by the ship losing the berth and the very purpose of the scheme is defeated. There is an obvious need for improvement in planning of the allotment of berths on the basis of better liaison with the agents of shipping lines who should also indicate the arrival time of their ships as dependably and accurately as possible.

MANAGEMENT ACCOUNTING

Application of the principles of management accounting would demand, by and large, rendering the port services on financially self-supporting basis without directly taking into account the overall

economic benefits to the country. Under these circumstances, a legitimate apprehension to be entertained particularly under the Indian set-up is that the port authorities would be chary of providing services otherwise needed by the trade and shipping interests out of a fear of financial loss. The ports would, therefore, cease to function as dynamic catalysts in the promotion of trade and economic development as demanded by the needs of a developing country.

COMMODITY STUDY

FABRICATED AND MANUFACTURED MICA*

MICA is nature's most perfect insulation material. It is resistant to heat and is the best insulator. Because of its high insulating properties, mica finds vast application in the electrical and electronic industries and is regarded as one of the most strategic materials. The bulk of the mica produced in the world is consumed by the highly industrialised countries. These countries import mica in semi-processed form (blocks, splittings, films and scrap), which is further processed and fabricated into various components for use in electrical and electronic equipment.

Since the beginning of the present century, India has been enjoying near monopoly in the production and export of semi-processed mica. She meets about 80 per cent of the world demand. In spite of her monopolistic position, foreign exchange earnings from mica exports are low, mainly because mica is exported in semi-processed forms which yield low unit values. The foreign exchange earnings during the past decade have ranged from Rs 10 crores to Rs 12 crores (post-devaluation Rs 15.75 crores to Rs 18.90 crores per year).

The situation has been further aggravated by two recent developments. The first is the promotion of mica mining industry in Brazil with sizable investments by the USA. Because of the US financial involvement, the USA would naturally prefer to buy some of her future requirements of semi-processed mica from Brazil. The second is experimentation on a large scale in the USA for development of synthetic substitutes for mica, which is likely to pose a serious threat to our exports of mica in the near future. The only possible way to check this threat appears to be the speedy establishment of fully processed or fabricated and manufactured mica products industry and continued supply of mica components to the basic industries of the developed countries at competitive prices. This will make for better unit returns and contribute to maximisation of foreign exchange earnings from mica exports.

*Prepared by H.S. Marwaha, Asstt. Chief, Indian Institute of Foreign Trade, on the basis of *Commodity Study Report on Fabricated and Manufactured Mica*.

In addition, this would also diversify export trade in mica. With the above objectives in view, the Indian Institute of Foreign Trade has recently made a study of fabricated and manufactured mica on assignment from the Mica Export Promotion Council.

The Study covers 24 selected manufacturers and manufacturer-exporters of fabricated and manufactured mica and 50 leading end-users of mica at Koderma, Giridih, Calcutta, Gudur, Madras, Bangalore, Bombay, Bhopal, Bhilwara and Jaipur.

Mica manufactures include a wide range of fabricated and manufactured products. Fabricated mica products consist of cut condenser films, spacers, washers, discs, sheet strips cut to shape and size and heater plates. Manufactured mica includes micanite, mica powder (dry and wet ground) and mica bricks.

Production: At present, official statistics on the total capacity and production of fabricated and manufactured mica are not available. The production of the units contacted was of the order of Rs 1.35 crores in 1965-66 (including Rs 0.15 crore worth of mica bricks which are no longer exported). Bihar with a share of 36.5 per cent of total production was the leading State, followed by Mysore and Maharashtra with a share of 19.2 per cent and 16.6 per cent respectively. Fabricated products had a share of 80.5 per cent. The share of manufactured mica products like micanite, mica powder (dry ground) and mica bricks was 19.5 per cent only. Since export of manufactured mica products like micanite and mica powder is insignificant and mica bricks are not at all exported, their production is almost stagnant.

Organisation of Data Collection: To facilitate formulation of suitable plans for the development of the industry, it is necessary that the basic data on production of various mica manufactures is collected on a systematic and continuing basis. It is, therefore, suggested that the concerned State Directors of Industries/Statistics should collect and maintain data related to the industry.

Need for Planned Growth: Mica manufactures industry, established in India only about a decade ago, has already made a good start which is evidenced by the steady rise in export of mica manufactures from Rs 2,070,800 in 1963-64 to Rs 8,710,800 in 1965-66. Mica manufactures industry is a growing industry and is likely to have greater export potential, so it is suggested that with a view to ensuring its planned growth and preventing cut-throat competition among its manufacturers, the Government of India may examine the possibility of the Industries (Development and Regulation) Act of 1951, as amended in 1961, being extended to mica fabrication industry. Further, the Mica Export Promotion

Council should set up a special cell for more attention to the problems of development, production, research and export marketing.

Machinery and Equipment: Mica fabrication industry requires highly sophisticated dies for the production of complex products like condensers and spacers. Production of these dies is a highly skilled job for which duly qualified personnel are not readily available. Attainment of self-sufficiency in manufacturing right type of dies and precision gauges is a precondition for the full development of our mica fabrication industry. Top priority should, therefore, be accorded to this problem. The Mica Export Promotion Council may immediately take up with the Ministry of Industrial Development and Company Affairs the question of setting up a Dies Production Centre. This Centre may in the early stages employ foreign die-makers, if necessary, for producing quality dies and training Indian personnel in the techniques of producing sophisticated dies. In the short run, mica fabricators may be granted liberal import licences on a priority basis against firm export orders for import of dies.

Fabrication of mica products requires various types of precision tools, surface grinders, cutting tools like rimmers, drills and milling cutters of special design. These tools are sometimes of non-standard shapes and sizes. It would not, therefore, be possible for any single unit to stock the entire range of precision tools required. Provision of tool rooms for this industry is thus very essential. Out of 24 respondents contacted, only 3 were equipped with their own tool rooms. The rest reportedly lacked capital for investing in the tool rooms. It is, therefore, suggested that the Government should consider setting up a "Tool Room" in some central place, preferably at Calcutta, to cater to this important requirement of the industry.

Cost of Production: High cost of production makes Indian machine-made micanite incompetent in foreign markets. The factors, which increase the cost of production, were reported to be certain taxes and levies such as sales tax and licence fee of P 75 per litre on denatured spirit, imposed by the Government of Bihar. It is, therefore, recommended that the micanite industry, which is basically export-oriented, may be exempted from the aforesaid taxes and levies.

Mica Powder and Mica Bricks: The utilisation of waste mica, annual production of which is estimated at 25,000 tonnes per year (about 85 per cent of the mica mined in the country), is a big problem. There is a need for considerable research to find out commercial uses of this waste. At present, mica powder (dry ground) and mica bricks are manufactured from waste mica. Besides, a process

for manufacturing mica powder (wet) has been developed by the Central Glass and Ceramic Research Institute, though it has not yet been commercially exploited.

Mica powder (dry ground) worth Rs 3 lakhs was exported in 1965-66. Its export potential is, however, tremendous. In 1963, the USA alone consumed mica powder worth \$6,805,000. Most of the European countries also produce mica powder (dry and wet ground) from imported Indian waste mica. In view of the availability of cheap raw materials and labour, India should be able to compete in world markets in respect of these products. We must, however, concentrate on bringing down our costs.

Research and Development: It has been stated earlier that substitutes like reconstituted mica, somica and ceramic capacitors are steadily but slowly gaining ground in the USA and West European countries. In view of this trend towards substitution, there is every possibility that in the long run, mica may meet the fate of indigo. It is, therefore, proposed that the Government and the industry should jointly take suitable measures to arrest further headway of the substitutes by the creation of a Mica Research Development Fund and the establishment of an independent Mica Research Institute. The proposed Research Institute will (a) find out further end-uses of mica and mica waste, (b) develop mica and micanite products of suitable quality, (c) take measures for substitution of foreign insulation material by mica, and (d) ensure that the mica products are economically produced and offered at a competitive price as compared to substitutes.

Mica Manufacturer-Exporters Associations: In countries like the USA, the UK, the Netherlands and Belgium, Manufacturer-Exporters Associations play a useful and effective role in the development and diversification of the industry. At this developing stage of the industry in India, it is desirable that the fabricators and manufacturers should share their experience and knowledge to their mutual advantage. The Mica Export Promotion Council may, therefore, consider the possibility of forming similar associations of mica fabricators, manufacturers and exporters at major production centres in India.

INTERNAL CONSUMPTION

The demand for mica in the home market is linked up with the progress of electrical and electronic industries. Since the development of electric goods industry was limited, there had been in the past only a negligible consumption of mica in India. However, with the setting up of the heavy electrical and engineering industries and steel plants and increase in the production of electrical

goods, India has now started utilising mica in different forms. No systematic attempt was made earlier to find out the present as well as potential consumption of mica by various industries in India. One of the objectives of the IIFT Study, therefore, was to collect authentic information regarding the level of present and future consumption of mica.

The survey of 50 main mica-consuming units reveals that the current consumption of all types of mica and mica products in India is of the order of about Rs 0.30 crore per annum and is likely to go up to Rs 0.90 crore in 1970-71. The survey further reveals that the end-users of insulation materials in India are not well-informed about the superiority of mica as an insulation material. Many respondents stated that they were continuing the use of other insulation materials, as these were in use since the very inception of their respective factories. As a measure of import substitution, dissemination of technical information on various types and qualities of mica as compared to some of the well-publicised substitutes like polyester films and ceramics is of prime importance. It is suggested that Mica Research Institute, the establishment of which has been suggested earlier, should undertake an intensive campaign among the end-users for dissemination of information on various end-uses of mica and highlight its superiority as nature's best insulation material.

EXPORT MARKETING

Indian fabricated and manufactured mica products are mainly exported to the USA, the UK, West Germany and France. The combined share of these countries was about 90 per cent of the total value of export of mica manufactures in 1965-66. Condenser mica films cut to shape alone accounted for about 52 per cent of total exports in that year.

Exports of mica of all types were of the order of Rs 10.36 crores in 1964-65 and Rs 12.10 crores in 1965-66, of which the share of fabricated and manufactured products was Rs 40.5 lakhs and Rs 87.1 lakhs respectively, representing 3.9 per cent and 7.2 per cent of the total.

India has a negligible share in the volume of fabricated and manufactured mica consumed by industrialised countries. These markets offer ample opportunities for promoting exports of these products. Stiff competition from national industries abroad, high ocean freight, lack of technical know-how and end-uses of mica, paucity of business relations on a personal level, non-adherence to delivery schedules and inadequate publicity are some of the problems to be reckoned with.

Export Price: Since Feb. 1, 1964, minimum f.o.b. prices have been fixed for semi-processed mica. This stipulation, however, does not apply to mica manufactures. Prices of fabricated and manufactured mica are, at present, settled by negotiations between the exporter and the importer. The exporters hold divergent views on the question of floor prices for mica manufactures. Those for it are of the view that the introduction of floor price would safeguard the industry against future cut-throat competition which had previously affected adversely the semi-processed mica trade. Those holding the opposite view-point contend that the introduction of floor price would harm the industry as it would antagonise the foreign buyers whose goodwill is essential. At the present stage of development of mica manufactures industry, it is important not only to offer products at competitive prices but also to retain the goodwill of our buyers. It is, therefore, desirable to consider the introduction of floor prices at a later date when the industry is firmly established.

Ocean Freight: At present, ocean freight on the shipment of mica manufactures is charged on the basis of the value of the consignment and not on their weight or volume. Since the unit value of mica manufactures is four to five times higher than that of natural mica, the ocean freight element in export costing is very high. The Mica EPC should, therefore, take up the matter with the Freight Investigation Bureau, Directorate General of Shipping, for suitable reduction in freight rates.

Export Duty: Subsequent to the devaluation of the rupee, the Government of India imposed an export duty of 40 per cent *ad valorem* on semi-processed mica and mica manufactures without any distinction. The incidence of duty on fabricated and manufactured mica, as compared to that on natural mica, is extremely heavy, as the former's unit value is about four times higher than that of the latter. This indirectly provides encouragement to exports of semi-processed mica *vis-a-vis* mica manufactures. The export duty on mica manufactures should, therefore, be reduced substantially so that it could work out to only 10 per cent *ad valorem*.

Foreign Tariff: Semi-processed mica is not subject to import duty in any of the importing countries, but fabricated and manufactured mica products attract import duties which range from 12.5 per cent to 26 per cent. This is detrimental to the establishment of mica-based industries in a developing country. In order to make this industry competitive in the international market, the need for securing substantial reduction in these duties is obvious. It is, therefore, suggested that the Government of India may approach important mica-importing countries, particularly the USA, for a reduction in their import duties on mica.

Export Finance: For exports of fabricated and manufactured mica, there is no stipulation in force such as the opening of a letter of credit by the buyer in favour of the exporter before the shipment of the consignment. The exporters of fabricated and manufactured mica receive payments only after the foreign buyers accept the consignments, which may take two to three months. Thus their capital remains blocked for a considerable period. Added to this is the risk that their products may not come up to the specifications and be rejected by the importers. The entrepreneurs are, therefore, hesitant to invest in this industry. It is, therefore, recommended that the Export Credit and Guarantee Corporation should examine this problem so as to be in a position to provide suitable export credit facilities to the industry.

Visits Abroad: Lack of coordination between foreign consumers of mica and Indian producers is one of the main reasons for the uncertain growth and development of Indian mica products industry. For keeping abreast with the latest technical developments abroad and for the expansion and consolidation of exports, regular business visits abroad by manufacturers, exporters and trade delegations are essential. It is necessary, therefore, that the Mica Export Promotion Council should sponsor study-cum-trade delegations to major mica-consuming countries.

Export Marketing Consortium: The Study reveals that there is no coordination of efforts among mica manufacturers for the development of the industry and promotion of its exports. In case the manufacturers/exporters of mica pool their resources by forming a consortium, the industry will be in a strong position to meet large orders and to offer mica products at competitive rates.

Publicity and Advertisement: India enjoys world-wide reputation as the premier supplier of semi-processed mica. She has now started fabrication and manufacture of mica products also. There is a need to publicise the fact that India, "the home of mica", can supply mica manufactures as well. This can be done by participation in exhibitions of electrical, electronic and engineering products industries. Advertisements featuring the growth of Indian mica manufactures industry in journals connected with the major mica-consuming industries would also help in focussing attention on India's ability to supply fully processed or manufactured mica products. In other words, it would be necessary to undertake an intensive publicity campaign in the major mica-importing countries. The Mica Export Promotion Council should, therefore, prepare a three-year overseas publicity programme with cost estimates. For the implementation of this publicity programme, the Ministry of Commerce may be approached for liberal financial assistance from the Market Development Fund.

CONCLUSIONS

Owing to labour shortage and high wages in the USA and some of the West European countries, it is uneconomical for these countries to continue labour-intensive fabrication of mica products. Since abundant labour and raw materials are available in India, vast scope exists for stepping up production of mica manufactures and their exports. The Mica Export Promotion Council should explore the markets of developed countries and the possibility of entering into long-term arrangements with foreign consumers and manufacturers for export of fabricated and manufactured mica products. The Government of India should also consider the possibility of sending trade delegations to major mica-importing countries and persuade their governments to buy fabricated and manufactured mica products from India in the place of semi-processed mica being exported at present.

BOOK REVIEWS

NEW HORIZONS IN MARKETING

BY H. KARSTEIN

Thacker and Company Ltd., Rampart Row, Bombay-1; 1968;
Pp. XVIII+239; Rs 17.50.

This book gives a scientific and realistic exposition of modern marketing concepts and practices. It is interesting, particularly, for the author's skilful integration of marketing methods and techniques with illustrative case material of selected Indian companies.

The author, now a Marketing Consultant, has acted as Marketing Director of several well-known organisations in India since 1938. On the basis of his rich experience and knowledge in the field, he holds the view that most organisations can improve their operational efficiency by using modern marketing tools. With this premise in mind, he has divided the book into two parts. Part I explains the basic requirements for putting a firm's marketing operations on a sound footing. In Part II, an attempt has been made to dispel what appear to be the most prevalent marketing fallacies.

The author explores in the book selected phases of marketing including nature of marketing, management of marketing operations and marketing efficiency, and treats each phase in terms of the processes involved. Starting with an analysis of the stages of economic development, he explains how in the absence of competition in the early stages of development no attention is paid to marketing or its sub-functions. As development process grows, competition develops and companies find themselves suddenly faced with problems of marketing which are much more complicated than those of production and finance with which they dealt mainly in the past. It is at this stage that companies need efficient marketing, which does not come about unless they plan ahead to develop their marketing strategy to meet the situation when it arises. Citing examples of specific Indian industries and individual companies shifting from sellers' to buyers' market and the consequent problems faced by them, the author explains that when such a change-over takes place, people talk of recession or slump. Here he gives instances where Indian companies, which had foreseen the possibility of a recession, took adequate steps to face the situation successfully.

The author has rightly laid stress on selecting the right type of marketing personnel and has categorically stated that with a given product, more than any other single factor, marketing personnel determines the product's marketing success. The basic characteristics which marketing persons must possess are

empathy, a sense of humour, high degree of sincerity to the organisation and to the customers, willingness to learn and ability to acquire knowledge.

Developing the theme of marketing efficiency, the author outlines two basic principles of the marketing concept, namely, customer orientation and adequate return on investment, and explains how marketing functions, viz., product research and development, pricing, distribution, merchandising, advertising, consumer service, marketing research and selling can be integrated with the overall marketing plan to achieve the marketing objectives of the organisation. The most significant aspect of his exposition is the belief that standards of performance for each marketing function can be set and achieved to realise more return on investment. This part of the book provides a fresh approach to marketing problems and contains profitable suggestions to sell more at less cost through greater efficiency.

The second part deals mostly with advertising and sales promotion, and with suggestions for achieving greater productivity in marketing through better utilisation of these marketing resources. This is as much true of advertising as of other marketing inputs. Initiating the discussion that each product needs its own marketing strategy, the author exposes popular fallacies such as "all products need intensive advertising"; "advertising pays for itself"; "the better a campaign is liked or remembered, the more successful it is"; "advertising sales effectiveness cannot be measured"; and "promotion budget should be percentage of sales". This analysis helps to identify out-dated marketing notions and beliefs and provides original thinking to those responsible for planning marketing operations. The fact that this analysis is largely based on the case-studies of Indian companies contributes to a better understanding and appreciation of the problems under study.

Mr. Karstein has been frank to acknowledge that not all aspects of marketing, which enable the marketing function to operate with greater efficiency, could possibly be discussed in the book. There are many other aspects such as marketing research, distribution channels, pricing policies and packaging, which need a detailed treatment. The author proposes to bring out another volume to fill in such gaps. The present book is a must for marketing practitioners and those interested in market surveys and marketing research.

—R.N. Shivpuri

PRICE FIXATION IN INDIAN INDUSTRIES

By Economic Research and Training Foundation, Indian Merchants' Chamber, Bombay; Pp. 246; Rs 25.00.

The book, *Price Fixation in Indian Industries*, has emanated from an enquiry made by the Economic Research and Training Foundation of the Indian

Merchants' Chamber, Bombay, into the principles, pattern and procedures of price fixation, as adopted in India specially by statutory authorities and *ad hoc* committees. The panel of its authors consists of leading personalities in trade and industry, so the publication is throughout a depth study of the subject covered.

In an economy like ours, which is faced with the twin problems of inflation and recession, fixing of prices is of vital importance. According to traditional analysis, prices are determined by the inter-play of two factors, namely, supply and demand. If demand exceeds supply, prices rise; and if supply exceeds demand, prices fall. While the demand is determined by the consumers' desire and their purchasing power, the supply side is based on suppliers' capacity, their costs and hoarding power. These four factors play a crucial role in price determination. Any scheme of price regulation, if it has to achieve the desired objectives, must reckon with these four factors in an integrated manner. When certain imbalances emerge in the economy, the entire price-cost relationship is disturbed and a state of disequilibrium emerges, giving rise to erratic behaviour of prices. It then becomes a paramount duty of the price-fixing authority, whether it is a statutory body or otherwise, to even out the disturbing factors and regulate the price behaviour by adjusting prices to such a level as to tide over the temporary situation of imbalances in supply and demand, and, in the long run, to stimulate production, encourage expansion and thus promote the objective of rapid economic development.

According to modern analysis, the functioning of the price system is a centre-piece of the economic system. It means that if the price of a product goes up, the society needs more of it than what is currently available. This price rise would have the effect of attracting more producers in the line, thus mitigating the original shortage. On the other hand, if the price of the product goes down, this acts as a red signal to producers and investors, suggesting to them that deployment of more resources in the field would bring them loss. According to this line of reasoning, the pricing system helps in selecting the range of goods and services the economy needs, allocates the production resources of the community into right channels and brings about the right distribution of goods produced among different customers.

While cost is an important element of the level of prices, there are other factors which have an equivalent impact on the determination of final prices. Costs alone do not determine prices. The only general principle that can be stated is that, in the end, there must be some margin in prices over total costs if capital continues to be deployed in the industry.

While the cost plus pricing method is most common, it may be argued that it is not the best available method because it ignores demand or fails to adequately reflect competition or is based upon a concept of cost which is not much relevant to price decision in all cases. What is essential is not so much of current or past costs but forecasts of future costs with accuracy. In many cases, incremental

costs rather than full costs may be appropriate, but in the ultimate analysis, economic costs are more relevant for pricing particularly when it is intended for consumption in the home market. In developing concepts of different costs for different purposes, management must recognise that the technique of pricing is a job that requires great flexibility and adaptation to market situation.

Generally, the purpose of fixing prices to a reasonable level is to increase production and sales and secure an adequate return on capital employed. In order to achieve these objectives, many techniques of pricing such as skimming off prices and penetrating prices have been used by entrepreneurs in advanced countries. If the commodity is intended for export, the idea of marginal costing is generally pursued. In many of our industries, the concept of marginal costing is not adopted. As recommended by this study, the costing methods in India need more to be systematised by introducing methods such as standard costing.

The book gives an evolution of price policy in India since the first Tariff Board was constituted in 1923. It refers to the formula adopted by the Tariff Board and later on by the Tariff Commission in determining prices of several industries. It goes into the details of fixing prices by Electricity Supply Undertakings, principles followed by the Damle Oil Price Enquiry Committee and Talukdar Committee. The great difficulty in fixing prices in India is that no uniform system of costing is pursued by industries. If price is to be fixed over a long period for any industry, it would be absolutely essential for the industry to adopt a system of uniform costing which would enable cost to be compiled, tabulated and compared. It is, therefore, very essential, as recommended by this study, that accounts should be maintained by the firms in a form readily suitable for costing. A lead has already been given in this matter by the Department of Company Affairs by the introduction of Cost Accounting Records (Cement) Rules, 1966. Another suggestion that bonus to employees should be considered as an element of cost, does not seem to be tenable inasmuch as bonus is paid out of the profits of a company. If bonus is to be considered a part of the cost, then the consumer will be further burdened merely because the profits need to be shared both by the employer and the employee.

Reference has been made in the book about the incidence of indirect taxes on prices. As pointed out by the authors, it is difficult to calculate the extent of the burden of various local taxes and duties on the cost structure. An attempt should, however, be made to calculate the incidence of sales tax and central excise duties on industry-to-industry basis, so that the industry could make out a case about the heavy incidence of these taxes. In fact, while recommending the refund of sales tax, the Saraiya Committee on Sales Tax faced the same problem. And unless some calculation is made about the incidence of these taxes, particularly the sales tax and other local levies, it is difficult to build up or to justify the case for the refund of these duties particularly on exports. The Economic Research and Training Foundation would do a great service to Indian industry and trade and to the Government, if some such study is undertaken

by it. The ERT Foundation is in a better position than others because it has the support of the companies.

The study is useful and beneficial not only to the economists, cost accountants, industry and trade but also to students who have interest in the subject. The analysis is coherent and subject coverage is comprehensive. It is a real addition to the available information on the subject. The book would have, however, served the industry and trade better if it had also dealt with the techniques and procedures of calculating prices for exports. There is a great dearth of information on the subject of export pricing and very few people know the techniques of calculating prices for exports.

—*M.L. Garg*

FINANCE OF FOREIGN TRADE AND FOREIGN EXCHANGE

BY G.S. LALL

H.P.J. Kapoor, 3081, Partap Street, Subhash Marg, Delhi-6; 1968 ;
Pp. VIII+296; Rs 22.00.

This book gives a descriptive account of the procedures and practices of effecting international payments, in addition to brief explanatory notes on relevant institutions and concepts. The first chapter gives the background by detailing out the credit and debit items in the balance of payments of a country, the function of the foreign exchange market, the role of banks in foreign exchange transactions, and the alternative methods of effecting international payments. Chapters II and III deal with the theories relating to the determination of the rate of exchange and the explanation of the various terms used while quoting exchange rates. A brief analysis of the need for and the method of obtaining cover against exchange rate fluctuations is given in Chapter IV. The rest of the book describes the various documents used in effecting international payments such as commercial letters of credit, bill of exchange and the arithmetic of foreign exchange. In Chapter VIII, a very superficial description of International Monetary Fund is given, which would have been more appropriate if it were placed in Chapter III, where determination of exchange rate has been discussed.

The author, no doubt, has brought to bear on the book his practical experience in banking operations. The book will be of particular interest to both students and the business community.

—*S.K. Verghese*

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Editor

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FOREIGN TRADE REVIEW

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NO. 3

A THREE-TIER STRATEGY FOR THE INDIAN EXPORTER

By S.P. Godrej

THE CHRONIC balance of payments deficits, dwindling free foreign exchange reserves and tapering foreign aid have made it unquestionably imperative for India to export to survive. It is, therefore, a matter of anxiety that, in spite of the homilies and pep talk that one so often hears from Government spokesmen, industrialists, writers and academicians, our exports have failed to register any marked upward trend. The hitherto apathetic and dilatory attitude of the Government was held to task for this anomalous situation. While this is, to an extent, justified, a genuine export-orientation of Indian business and a basic change in its attitude are also called for.

The prevalent attitude is that it is impossible to compete effectively in the international market in terms of price, quality and salesmanship. A common belief was that only the residue after the saturation of the domestic market need be exported. Consequently, Indian business has mostly regarded exports as a last resort.

The most important factor here is the economic environment. The economy of shortage has resulted in the creation, by and large, of a protected sellers' market where manufacturers are prone to ask: "When I can sell all my goods profitably in the domestic market, why should I venture into an unknown world where there are more potent forces at work and where I may lose?"

They, therefore, magnify the effort involved and convince themselves that they could not compete abroad, especially when it comes to the export of non-traditional items.

Such a situation has had the obvious effect of rendering superfluous the development and adoption of modern marketing techniques and concepts for domestic and foreign sales.

There is also another inherent feeling among conservative manufacturers not only in India but in many other countries as well. "To the majority," according to Michael Y. Yoshino, "manufacturing and marketing... are two different agencies under different institutional settings. Manufacturers' functions end with the creation of form utility in the narrowest sense of the term. Some even view selling with disdain."¹

To quite an extent, we had become engulfed in a chain-reaction of phlegmatism and our salesmen have become tepid and colourless, incapable of asserting themselves in the international arena.

However, current economic realities dictate that we *have* to make a beginning somewhere and break away from the vicious circle of complacency, setbacks and fatalism. Cooler thinking also indicates that exporting is neither impossible nor unprofitable.

First of all, if the payments deficits continue unmitigated and foreign assistance drains off, the Government would bring in more controls and curtail imports further. This would have the effect of stifling many of our industries.

Second: The recent recession in certain sectors and the growing sense of discrimination of Indian buyers have shown that it would be suicidal for businessmen to rely entirely on the domestic demand.

Third: Purely from the point of view of efficiency and profits, if exports cover a good part of production, there would be greater chances of level production and steady sales. Seasonal fluctuations would be minimised.

Fourth: Even if there are some explicit losses in exports, they can be amply made up by export incentives, tax concessions, import licences and widening business contacts.

Fifth: Recent studies have revealed the existence of huge idle capacities in many industries. In such a situation, the costs

¹Michael Y. Yoshino: "Marketing Orientation of International Business", *Business Topics*, Vol. XIII, 1965.

of manufacture tend to be high and if the costs per unit can be reduced, our products will become more competitive both domestically and abroad.

Sixth: The gap between our level of market sophistication and sales efficiency and that of the developed nations is admittedly wide, but the alarming feature is that the gap is *growing wider*. Even in a high-strung market-oriented nation like the United States, there is a growing feeling that their marketing management must become *more* international-minded at all levels, or else face failure, even at home.² American corporations are thus set for yet another revolution in marketing.³ The point that arises is whether we can afford to sit back and let them push us out of every market for ever. This is the time to make a serious effort to bridge the gap or it may be too late.

Seventh: The question of impossibility is untenable and fallacious. Price is definitely an important factor, but not the only one. If price were the only consideration in international trade, the United States would not have had such a consistent surplus in its balance of *trade* for over two decades (this should not be confused with its recurrent balance of *payments* deficits) though American prices are generally higher than international prices.

As regards quality, our products can, and often have, come up to international standards and specifications. If a firm is unable to produce goods of good quality, sooner or later it will be pushed out of the domestic market also.

Eighth: It is absurd to think that since the advanced countries have taken a commanding lead over us in marketing, we have no chance at all in exports now. We cannot beat them in every department of the game, but we *can* run up a good score. What is needed most is the realisation on the part of our industrialists and managers that it is not so much the out-of-date manufacture

²For example, see Ray R. Eppert's article, "Passport for Marketing Overseas", in the *Journal of Marketing*, April 1965; and Simon Schochet: "Lack of Trained World Personnel Held a Serious Disadvantage", *Export Trade*, April 29, 1963.

³See Guy Gorden: "Let's Internationalise Our Marketing Students", *Journal of Marketing*, April 1964; Y. Hugh Furuhashi and Harry F. Evarts: "Educating Men for International Marketing", *Journal of Marketing*, Jan. 1967; "The International Element in Basic Managerial Education: A Symposium", *The Quarterly Review of Economics and Business*, Nov. 1961; Harlan Cleveland and others: "The Overseas Americans"; and Stephan M. Robock and Lee C. Nehart: "Education in International Business".

that is keeping us on a leash as the archaic and static ideas of marketing: that, if production is the door to economic growth, marketing is the key that turns the lock; and that marketing is more a question of persuading people rather than undercutting prices in the hope that the foreign buyers would queue up with order for our merchandise. If an exporter ventures out ill-prepared, there is bound to be a fiasco, but if he puts new zest in his marketing methods and adopts a scientific, rational, aggressive export policy, success cannot elude him. This paper traces a three-tier approach towards developing such a policy.

TIER I

THE EXPORT DEPARTMENT

We cannot build a sky-scraper on marshy ground. We have to lay a strong and enduring foundation. This is so in exporting also. The foundation in this case is the Head Office Export Department, an entity that can plan and manage the company's foreign operations and set up a system for evaluating, motivating and controlling the performance of its overseas sales force.

Past experience has shown that it is not so much the size of the company that matters in export marketing as the drive and organising ability of its directors and key executives. The field force, however good it may be, would stand little chance of success unless it is backed by a positive-minded base office, and the effectiveness of the Export Department itself depends on the calibre of its chief and other key executives. Hence, the primary problem is that of staffing.

Staffing: In most Indian companies today, exports are regarded as an appendix to domestic sales and, very often, the sales manager or director is asked to "look after" exports also, who does so by directing, perhaps, 95 per cent of his time and energy towards home sales and 5 per cent towards foreign sales.

At times, overseas operations are also left in the hands of the managing director or senior director who may be preoccupied with a host of other affairs such as production, administration, domestic sales, finance and what not, or who may be owing his success to his proven technical rather than marketing skills. There is no harm, basically, of course, in putting the exports division under a managing director, but it is essential that he should be in a position to devote much of his time and energy to it. Exports can also come under the direct charge of a senior executive, but then, he should consider this as his main, or only, function.

The main point is that there should be no *ad-hocism*. There should be a permanent, well-staffed, efficient export cell or department in the company, with a permanent, full-time chief who has a thorough knowledge of the work involved. He should also be basically a sales-oriented man. If the person has not proved himself in sales at home, it is far-fetched to believe that he would be successful in spearheading an export drive. If such a person is not found within the organisation, the right man can, and should, be brought in from outside. The staff under him should also be picked with great care. It need not be big but it should be dynamic.

Overall Planning: Planning and budgeting, unfortunately, are practically unheard of in Indian companies. However, these are prerequisites for corporate success. Every activity of a company should conform, as far as possible, to a *budget* and every employee should work according to a *plan*. It will be the Export Department's responsibility to lay down, in consultation with top management, the broad framework and ground rules for its overseas operations.

Product and Market Development: We have neither the resources nor the wherewithal to attack every corner of the world market at this stage. We have to export the right goods to the right markets. Certain products may have to be, in fact, altered or modified to suit the requirements of the buyers. The home office must see that the products developed for exports are such as can be easily adapted to foreign markets. "The customer is king," it is said, and it is more so in exports.

The act of pushing the products into a foreign market can be accomplished in two ways:

(a) By providing *fillers*, i.e., by finding any vacuum in the supply position and immediately filling it up with the company's products. This will result only if the home office gets, and makes use of, adequate feedback from its foreign field force about the demand and supply position for various items in different regions. This calls for a high degree of perception, knowledge, alertness and shrewd judgment on the part of the Head Office as well as its representatives abroad. The company should be able to "cash in" on any loophole in the existing demand and supply situation. For example, after the Arab-Israeli war last year, most Arab countries banned imports from western countries. This presented a splendid opportunity for our exporters and, in fact, one company in South India had the presence of mind to send its marketing manager immediately to the UAR—and he returned with a bumper order of Rs 30 lakhs for India-made pistons!

(b) Another method would be to *develop* a market for the company's products. This is a much more complicated affair, necessitating considerable spade-work on the part of the Head Office. The Export Department will have to find out who the potential buyers are, which are the most vulnerable and lucrative markets, what does the overseas buyer exactly need, when should the product(s) be introduced and how the product(s) can be altered or modified to suit the requirements. Marketing research is an essential tool in this venture.

A typical example of *developing* a market is illustrated by the successful infiltration of British, West German and Japanese small- and medium-sized cars into the US market. The compact car was considered taboo in the US market because of the purported big-car-mindedness of Americans. However, British and West German small car manufacturers made a gigantic effort in the 1950's and their gamble paid off, so much so that Volkswagen is now the most sought after imported car in the States and the US manufacturers such as American Motors Corporation, are obliged to bring out compact models to compete with the imported ones. This, incidentally, also shows how exaggerated, if not illusory, the barrier of "impossibility" is.

Sales Promotion: This is one of the most effective ways of pushing the goods of a company into the world market and this could become the decisive factor if there is severe competition from others in terms of price and quality. Japanese and West German organisations, in particular, have consistently increased their foreign sales promotion budgets. This is, however, a delicate field and, unless deep preparatory research is undertaken, foolish and wasteful mistakes may creep into the campaign. The Head Office Export Department should give substantial attention to the following aspects of sales promotion:

(a) *Design, packaging and despatch:* There are three areas which are vital in export marketing, but which, because of their apparent inconspicuousness, are not assigned enough importance. It is the design and colour that initially attract the buyer, especially if it is a consumer item, and the product has, therefore, to be adequately "dolled up". The packaging should be made both attractive and protective, keeping such factors in mind as the tastes of the buyers, climatic conditions, storage, transportation and handling. Correct markings and other details are also necessary, as many countries have special regulations regarding markings. Information regarding these can be obtained from the company's foreign representatives, foreign trade commissions and from foreign journals such as *The Exporters Year Book* by Syren & Shipping Ltd. in London and its monthly publication, *The Merchant Shipper*.

Complaints are often voiced against us about the non-fulfilment of promised delivery schedules. What is worse, we are even reluctant to give a definite delivery date. It is a great national weakness that we are not confident enough to commit ourselves on any question. This uncertainty and undependability drives buyers elsewhere. The home office must ensure that export goods are given top priority and despatched in time.

(b) *Sales literature*: Good sales literature is an inestimable asset to the salesman. The Export Department should produce decent, glossy, informative brochures and export catalogues for its products in three or four leading foreign languages. Unfortunately, most of our firms do not have an export catalogue at all, let alone a good one. The home office should also bring out a sales bulletin and produce sales, training and reference manuals for its staff, export representatives, agents and salesmen.

(c) *Advertising*: One of the most problematic and thankless tasks in foreign operations is the element of advertising, especially because of the near impossibility of measuring the impact or direct result of an advertising campaign. Nevertheless, the Export Department, in consultation with top management, will have to decide whether or not to have foreign advertising and, if the decision is positive, it will have to make a judicious cost/benefit analysis of various types of advertising and formulate an advertising strategy that would ensure a cogent and concentrated campaign in specific areas rather than a loose and spasmodic one in many areas of the world. Perhaps, the biggest headache would be to choose between universal, national advertisements and spot or local campaigns. The natural tendency is to go in for advertisements in well-known magazines and journals with a "wide circulation". This presents many problems.

First: The cost. A single, full-page national advertisement in an American magazine like *Life* or *Fortune* could cost anything up to \$60,000. If an impact has to be made, many insertions in many magazines may have to be made. Would the sales so generated justify such huge expenditure?

Second: A universal theme has to be created. Would it be possible to create a theme that would suit every region? Certain companies like Mercedes-Benz, Volkswagen and Sony and some airlines have developed universal themes which they use in national advertisements in different countries. But then, their products and services are such that a universal theme *can* be perfected and their dispersed sales also justify national advertisements. Most markets such as the ECM and EFTA—and even national territories like the USA—are so heterogeneous

demographically, ethnically, culturally, socially and "psychographically", that they would frustrate the formulation of a universal theme. Marketing experts, in fact, can regale a visitor with story after story of how literal translations—on labels, in advertising copy or otherwise—have lost both money and customers.

Third: The choice of media. Should we choose newspapers, magazines, films or TV? Again, of these, which particular newspaper or TV channel? In the case of newspapers, none in the USA or Continental Europe—not even the *New York Times* or *Los Angeles Times* or *Le Monde*—can be termed as "national" in the British or Indian sense. Further, in underdeveloped countries, there are practically no specialised journals while in the advanced countries there is a plethora of them. Which would we choose?

From these points of view, "local" or "spot" advertising seems to be more efficacious.⁴ The choice of media is easier; it is less costly and the target can be hit much more effectively. However, the problems here are to find out which are the "pockets" or potential markets, worth aiming at and how much to budget for at each selected campaign centre. This can be achieved only through intensive market research.

Under such circumstances, *Direct Mailing* would be even more efficacious and less costly, especially for an average Indian firm. An exporter cannot afford the risk of mistakes, and a medium-sized concern cannot spend its time in evaluating the rights and wrongs of advertising and pros and cons of media. Direct mailing can be a valuable way of reaching every potential customer, if it is handled well, if it is sent to the right people at right times and if the material is produced well. Advertising, in whatever form it is, can never click if the copy is insipid and lack-lustre.

Marketing Research: Under almost every previous heading, we came to the inevitable conclusion that marketing research is a prerequisite for proper diagnosis of problems and situations and for corrective action. This is not an era of hunches and an exporter has to be sure of his moves. Mistakes in exporting can be costly and avoiding errors is the object of research.

Much of the primary data would have to be obtained through market surveys conducted by the company's representative abroad or foreign agencies, but certain secondary data can be compiled by the base office itself.

⁴For a contrary view, see "The Danger of 'Local' International Advertising", Arthur C. Fatt, *Journal of Marketing*, Jan. 1967.

Collection and Dissemination of Information: "Go and see for yourself" is the advice given to tiro exporters by all and sundry. The Government too, in its eagerness, gives the clearance to any person who whispers the magic word "exports", with the result that a number of novices run helter-skelter from one country to another, without adequate prior preparation. These export "drives" may subsequently turn out to be either merry-jaunts or frustrating business trips.

While foreign trips *are* useful, sufficient ground-work will have to be done earlier by the Head Office Export Department.

A great deal about foreign lands—their people, national characteristics, culture, traditions, government regulations, formalities regarding export documentation, etc.—can be found by the Head Office itself from such sources as the Ministry of Commerce, foreign embassies, trade commissions, the National Productivity Council, Export Promotion Councils, the Indian Institute of Foreign Trade, banks, trade associations, research organisations, publications of the UN and various national and international agencies and certain general publications like *Fortune*, *International Management* and *Whitaker's Almanac*.

The Head Office should collect and collate information and pass it on to its representatives. Similarly, it should also arrange for *them* to collect information and pass on to the home office. Hence, the Export Department will also have to be a type of clearing house.

TIER II

THE EXPORT REPRESENTATIVE

Why should a company have an export representative?

As in war, so in business, it is the men, more than the machines, that count. The logical next step for an exporting organisation, after establishing a sound base in the Head Office, is to appoint, train, and make use of a set of highly qualified and competent representatives exclusively for exports.

The present practice is to have the managing director or senior executive pay a few, fleeting visits to various countries, appoint some agents and let things take their own course thereafter. This may be tolerable when token exports are made, but is of negligible significance when foreign sales are intended to be a major component of the company's operations.

While it may be good, or even essential, for the senior director or executive to go abroad for top-level contacts or for

boosting the morale of agents and salesmen, a prerequisite for success in overseas selling is the *continuous* evaluation, motivation and control of the people in the field. This can be achieved only through continuous, or frequent, *personal contacts* and not through the placid, inanimate communications from the Head Office or the sporadic excursions of the top brass.

It would also be myopic for a company to rely entirely on its agents. Agents, after all, are interested primarily in their margin of profit and they also usually deal in other companies' lines. There has to be someone to keep a tab on sales, make on-the-spot checks, develop higher-level contacts and, in fact, do a great deal of personal selling himself, especially to the big customers. This person should be an employee of the company so that he may have undivided loyalty to it.

Judging from all these angles, the key to successful export activity seems to be the appointment of an adequate number of "live-wire" export representatives. The export representative has proved his indispensability to most of the top export houses of the United States, Western Europe and Japan and he could be of immense use to us also.

The number of persons to be so chosen can be decided either in terms of the products to be sold or in terms of the market regions (such as Western Europe, North America, Eastern Europe and the USSR, Middle East, Far East and Africa). Similarly, the representative can be home-based or stationed in his operational territory after making a comparative cost analysis, i.e., the cost of the required number of visits abroad *vis-a-vis* a permanent establishment abroad.

What kind of person should the export representative be?

Paul H. Kierman, Mottram Torre, Harlan Cleveland and others⁵ have capsulised the requirements of an international salesman as belief in mission, organising and training skills, cultural empathy, diplomatic tact, proper perspective of his work, technical skill and a sense of politics. Specifically, these can be clarified as under:

(a) *Salesmanship*: He should be basically a salesman and should possess the qualities that make a good salesman such as

⁵Paul H. Kierman: "What It Takes to Be a Successful International Manager", *International Management*, Aug. 1963; Mottram Torre, Editor: "The Selection of Personnel for International Service"; and Harlan Cleveland and others: "The Overseas Americans".

personality, good health, sociability, keen interest in selling, thorough product knowledge and ability to travel extensively, converse well, move freely with a cross-section of people and to put forth his views calmly and convincingly. He should also know one or two foreign languages besides English.

(b) *Managerial Capabilities*: In addition to being a good salesman, he has to display certain managerial traits. He has to provide leadership, supervision, guidance and help to his subordinates and business associates and be a coordinator between them and the Head Office.

He has to gain the cooperation, friendship and respect of the agents and salesmen and keep a check on the distribution system, transportation, points-of-sale displays, retail outlets, stock position, sales promotion drives, after-sales service, etc. He has also to reply to queries from agents and salesmen on all matters.

He should also be capable of taking quick, rational decisions. It is useless to send a man abroad with insufficient authority or with the inability to use the authority, and expect him to succeed.

With this end in view, the company should absorb a youthful but mature person with a broad-based education and with some management training or qualifications. If the product to be sold is a highly complicated item such as machine tools, where technical knowledge is required, a person with a basic degree in engineering would be preferable.

(c) *Diplomacy*: There are at least three ways the export representative can display his diplomatic tact and talents in the field of human relations:

(i) *Developmental*: The aspirations and efforts of a great many nation in Asia, Africa and Latin America are focussed on the rapid transformation of their economies into "modern" ones and the attainment of higher standards of living. Knowledge of these economic growth processes is essential and the export representative should be able to convince his host countries that his products would fit constructively into their accelerated growth programme. A huge market exists in West and East Africa, Middle East and South-East Asia for our light and medium engineering goods such as lathes, but the countries concerned have to be convinced that these products manufactured by us will be of use to them. On the contrary, our exporters like our politicians, are sometimes accused of adopting a condescending attitude towards such countries.

(ii) *Cultural competence*: An extra quality that should distinguish an export representative from an ordinary salesman

is a natural ability that can be termed "cultural competence". It can take the shape of sensitivity to cultural difference; cultural empathy or the ability to understand the inner logic or coherence of other ways of life, plus the restraint not to judge them as bad; and ability to cope with, and adapt to, foreign environs easily.

(iii) *Public relations*: Being a concentric liaison man, the export representative can play a vital role in this field. The buying public is more likely to believe a "news item" than a "paid advertisement", and a first-class public relations man can obtain a great deal of favourable publicity at little cost.

As part of his public relations work, the representative should arrange for the company's executives and directors to address meetings abroad; help in writing their speeches; build up their personalities; organise sales conferences and film shows; help with exhibition displays and keep in touch with the authorities concerned; send out the right information at the right time to the right newspapers and TV companies; arrange press conferences; keep in touch with journalists, agents and salesmen; and take follow-up measures whenever necessary.

(d) *General Knowledge*: It is obvious that for most of the activities listed above, the export representative should have wide general knowledge and a thorough grounding in the fundamentals of applied economics. As we saw in the previous pages, the generation of sufficient relevant data is important for the Head Office to make meaningful analyses in various fields. The export representative should have the knack of putting his finger in the right place for information so that the Head Office can be fed with the right information at the right time.

(e) *Marketing Research and Advertising*: The importance of marketing research has already been mentioned. In most cases, market research and advertising are left in the hands of selling agents or advertising agencies. This could have disastrous results if the work is not checked at each stage by an employee of the company. The export representative should be aware of modern marketing research techniques and aspects of advertising, so that he could be the controlling or supervising authority.

How should the export representative be trained?

Like any other executive, the export representative has also to be trained adequately and properly to be useful. This can be accomplished by putting him through an intensive training programme.

He could first be given a refresher course in economics, salesmanship and marketing. During and after his training, he should keep track of modern trends in marketing, sales and advertising and assimilate the theoretical and practical aspects by reading such learned journals as the *Harvard Business Review*, *Journal of Marketing*, *Sales Management* and *International Management*. Certain basic knowledge can also be acquired by reading books like *The Principles of Scientific Management* by Frederick W. Taylor, *The Practice of Management* by Peter F. Drucker, *Scientific Sales Management Today* by Charles Wilson Hoyt and *How to Sell Successfully Overseas* by Alfred and George Tack.

Next, to gain a first-hand knowledge of the company, its operations, policies and philosophy, he should be rotated through all the departments, just as management or executive trainees are of late being trained by major companies.

The representative, stationed as he is thousands of miles away, has to face a barrage of queries abroad and cannot refer to the Head Office every time; and a technical query unanswered could result in a loss of orders. Product training, therefore, is an important feature. It has to be planned and given meticulously, without hitches and short-cuts, and it should last as long as it is necessary for the trainee to grasp sufficient knowledge. For this, there has to be proper coordination between sales and production also.

The training cannot be of much use without an export sales manual. This may seem an onerous task if only one or two overseas representatives are employed, but, unless there is a sound basis, the training is bound to fail. The manual helps the representative by giving him all the advice he needs before he travels abroad, improves his sales technique and assists him in his personal relations with his customers. As the manual must be easy to read, it should be well laid out and, if possible, printed.

The contents will naturally vary from company to company. However, in general, an export manual should cover: the history and philosophy of the company; export procedures such as packaging, finance and documentation; work brief, job specifications and terms of reference; product characteristics; aspects of human relations in selling; hints on travelling abroad; etc. It should also have a chapter on "how to answer objections", as the representative is bound to encounter innumerable objections on his beat in the international circuit. Many text-books⁶ recommend

⁶For example, see Alfred and George Tack: *How to Sell Successfully Overseas*.

the incorporation of a sales sequence, but most practical businessmen feel, and I agree with them, that it would be stifling to put a sales executive in such a straight-jacket. Apart from indicating broad guidelines and procedures, the representative should be left free to choose his own line and method of attack.

If the export representative is chosen in the right manner, trained properly and given adequate rewards, there is no reason why he should not prove his worth for Indian companies also.

TIER III THE AGENT

Perfection in exporting would involve a consistent stream of executives and representatives travelling abroad, a resident research organisation or consultant to carry out all preliminary work, and branches or exclusive sole distributors in every major country in the world. This is ideal but few, if any, Indian organisations can afford such complete coverage. Their resources, size and export earnings would not warrant the establishment of foreign branches and subsidiaries. The majority of companies, therefore, have to effect compromises to achieve a good export trade without incurring exorbitant costs.

It is also not possible for the export representative (who has other duties besides selling) to cope with the complete task of selling, especially if innumerable small customers are involved. His work has to be supplemented by the efforts of another force or group. But this force cannot consist of only the company's employees, as direct, personal selling in exports is a luxury which even the top-notch exporting houses in developed nations cannot easily afford.

For these reasons, most companies quite rightly delegate the distribution function in foreign countries to outside organisations.

However, the rub here is to *choose* the best agents or distributors for the *concerned company's* operations. An agent has to be so chosen that he will become not merely an impersonal middleman but an *associate* of the company.

Some exporters transact business through export merchants or commission houses based in the *exporting* country. This is a passive kind of selling, where the initiative comes from the *importer*. This stage can be bypassed if there is a good Export Department and efficient export representatives. An enormous amount of information on *overseas* agents can be obtained from commercial legations and trade associations. The *Handbook of Commerce*

and Industry, usually provided by trade commissions, are comprehensive publications which include lists of manufacturers' agents. Besides the well-known merchant houses, which are large-scale importers, there are also many smaller firms which can be very useful to the exporter. Since the export representative will be in the foreign country concerned, he will have to keep an eye on these sources of information. But the surest way to find a good agent is to advertise in the foreign country. A great deal of consideration must be given to the copy and layout of the advertisement. It must appeal to the right person and convince him that the advertisement is worth investigating. Here again, the export representative must take on-the-spot decisions, supervise the work of the advertising agency and cable home only for the broad outline.

When the advertisements are answered, the export representative must conduct the preliminary screening and make a short list of two or three applicants. At this stage, either he can be given discretionary powers to make the appointment, after making a reference to the Head Office, or, if it is an important case, a director or executive can fly out for this purpose.

When making the appointment, considerable thought should be given to the agent's status, financial position, references, general experience, sales experience, office organisation and territory covered. After the appointment, a detailed clear-cut agency agreement must be signed.

Good salesmen and overseas agents can make little headway unless they get adequate backing and support from the Head Office. The agent should also have complete product knowledge. The ideal arrangement would be to bring the agent home and give a complete sales and product training course, but, because of the time and cost involved, it may be appropriate if he is briefed thoroughly by the export representatives and visiting executives.

CONCLUSION

Sometimes, the market *potential* may necessitate the opening of a branch or subsidiary but the resources of the company may be inadequate for such a venture. In such cases, small companies in the same industry or product group can combine together and jointly open a foreign branch. Such groups have been formed in India also (e.g., cables and railway rolling stock) and some of them have proved successful. This kind of cooperation can be extended to other fields like advertising, public relations, market research and appointment of export representatives.⁷

⁷For a detailed study of this aspect, see H.D. Shourie: "Export Marketing Groups: A Measure for Greater Export Effort", *Foreign Trade Review*, July-Sept. 1967.

PROMOTION OF FOREIGN TRADE THROUGH AMERICAN SOCIETY OF INTERNATIONAL EXECUTIVES—A CASE STUDY

By Roland L. Kramer

THROUGHOUT all recorded history man has sought to improve his lot and to raise his standards. By means of a combination of experience and training (education) progress has been made. In the western world, every recognised profession today has an interesting history of trial and error, experience and testing, and public support and encouragement. The physician and the dentist originally obtained their training in the office of established physicians and dentists; they learned by precept and experience. As time went on, treatises and books were written for the benefit of those who were unable to affiliate with a practitioner. Eventually, educational institutions were established where the knowledgeable expert could teach and where recognised treatises could be used for instruction. Finally, the public took cognizance of these developments and established standards that must be met before the graduated student would be permitted to engage in the conduct of the profession in which he had been trained. Thus we see the evolution from mere experience to institutions of learning, recognised and controlled by the public.

This kind of evolution is clearly seen in the professional fields: medicine, dentistry, ministry, teaching, engineering, etc. In the more practical fields of business administration, the progress has been much slower. Perhaps the first of these fields was accounting, which through the years has been elevated to the level of Certified Public Accountant—CPA; and in the UK and the Commonwealth—the Chartered Accountant. Again, this is a combination of experience and training with a government-established system of testing. Other fields of business administration have been developing very slowly. Insurance is an area in which progress has been made to raise standards and to establish methods of testing. Within less than fifty years, insurance is a field in business administration that has succeeded in establishing the necessary credentials and testing methods to provide professional standing. Now we have the CLU (Charter Life Underwriter) rather than an ordinary life insurance salesman. He is a professional with credentials and deals with his clients—not customers—accordingly. The same idea is

now spreading to other fields of property insurance and also to the field of transportation.

These developments inspired the author of this article to devise a programme to bring about similar results in the field of international business. As Chairman of the Foreign Marketing Committee of the American Marketing Association ten years ago, the author presented a programme designed to professionalise the field of international business. Progress was slow and indeed discouraging. As a final effort to bring such a programme into being, the author solicited the cooperation of the Foreign Traders Association of Philadelphia, Inc., of which he was and had been the Executive Secretary for nearly thirty years. In the meantime, a former President of this Association and a personal friend of the author showed enough interest to devise an alternate plan to professionalise international business. After several more years of no progress, the subject was assigned to a special professionalisation committee of the Foreign Traders Association of Philadelphia, Inc. Things then began to move until finally in April of 1964 the Committee presented its programme to the Board of Directors of the Association and after a lengthy discussion the Board decided to support the programme and extend a loan to finance it. Thus was born the American Society of International Executives (ASIE)—a plan to professionalise the field of international business.

The readers may not perhaps agree to the author's distinction between a profession and an occupation. The author has consistently maintained that the professional sets out to perform a task, and performance is of paramount importance. In an occupation, a person is inclined to work a given number of hours for a given amount of effort devoted to a particular task. In the first case, performance is primary; in the second, income is primary. The author also points out a distinction in that the professional throws the clock away and the person engaged in an occupation works by the clock.

If you telephone a physician or clergyman at any hour of the day or night and express a need for his services, the chances are that he will respond and will give little or no attention to the income he may derive. On the other hand, if you telephone a merchant for a bill of groceries he will deliver them and probably collect on delivery. As an educator for nearly fifty years, I can honestly state that I have always tried to do well with my students, regardless of time, in spite of compensation.

It is this distinction that provides the impetus for the establishment of means and facilities for the recognition of the existence of professions and the arrangements under which they

operate. Perhaps it is a process by means of which a person who gives so many hours per day or week to his task for so much compensation is turned around and undertakes to perform the same task regardless of the hours or compensation involved. When this occurs, the worker becomes a professional; he places performance before compensation.

Labour unions would have never learnt this important lesson and perhaps it is not applicable to their operations. Nevertheless, it is interesting to dream of a world in which workers will be motivated by performance rather than compensation. At any rate, this is the world of the professional.

We may now proceed to tell the full story of ASIE. It is a non-profit national professional society to set standards, give examinations and bestow appropriate recognition on men and women with skills important to international commerce.

Founded in April 1964 and working in cooperation with export associations in other cities, ASIE is national and international in scope, with individual and corporate members in various parts of the United States and overseas.

ASIE seeks to raise the level of international career personnel and to stimulate their increased knowledge, capacity and growth. Proud badges of their profession are earned by key international trade personnel under the programme of the American Society of International Executives.

The individual member of ASIE gains through increased scope of knowledge beyond the immediate requirements of his or her job; by encouragement to progress up through the various grades; by increased productivity and earning power; by national professional recognition; by association with other career professionals; by increased opportunity for employment without agency fees when unemployed; and by nationally recognised credentials.

The corporate member gains through the encouragement to its personnel to increase their knowledge and productivity; by higher morale and *esprit de corps*; by greater interest in foreign trade work; by opportunities to secure unemployed trained personnel, duly certified; and by higher professional standards.

Mention was made above of individual and of corporate members.*

*ASIE also admits individuals as *experienced* members; *senior* (retired) members and *cooperative* members—those working for non-profit institutions.

ASIE admits individuals who pass certain examinations and also business firms that wish to support the programme of ASIE. In addition to the above-mentioned benefits accruing to such business firms, the personnel employed by them is accorded a discount on study outlines, examinations and membership fees.

Initially, in 1964 ASIE offered one examination; now in 1968 it offers nine different examinations. In the ASIE programme, these examinations now are:

Certified Documentary Specialist (CDS) is the initial grade for individual membership after examination and admission to ASIE. This grade is appropriate to export, import, forwarding, transportation, banking and other fields.

Certified Documentary Specialist requires (a) minimum of one year's experience in export documentary work, and (b) typing ability. Persons with higher qualifications are not expected to take the CDS examinations, but may apply for the highest grade for which they may be qualified.

All other examination classifications are divided into two categories, namely, Certified and Qualified.

Certified International Executive

In all cases, Certified International Executive requires:

- (a) at least two years experience in a specific international business field as assistant manager or by demonstration of ability to take charge during the absence of the manager; and
- (b) membership in an appropriate international trade association—export, import, traffic, forwarding, credit, etc.—either before or after the examination.

Present examinations under this category are:

Certified International Executive—Export Management (CIE-EM)

Certified International Executive—Traffic Management (CIE-TM)

Certified International Executive—Forwarding (CIE-F)

Certified International Executive—Air Forwarding (CIE-AF)

Qualified International Executive

In all cases, Qualified International Executive calls for:

- (a) at least five years experience in charge of a specific international business activity; and
- (b) membership for two years in an appropriate international trade association—export, import, traffic, forwarding, credit, etc.—either before or after the examination.

Present examinations under this category are:

Qualified International Executive—Export Management (QIE-EM)

Qualified International Executive—Traffic Management (QIE-TM)

Qualified International Executive—Forwarding (QIE-F)

Qualified International Executive—Air Forwarding (QIE-AF)

EXAMINATIONS

The reader will probably be interested in the contents of these examinations. This information is provided in the Appendix in order to demonstrate the scope of the international business field.

The first examination in 1964 was held in Philadelphia and shortly afterwards an examination was also held in New York. Due to the cooperation of foreign trade associations, business firms and regional offices of the US Department of Commerce, examinations are now held in important cities* throughout the country.

The first examination that was given by the Society on June 20, 1964 was a trial and as a result a formal CDS examination was held on October 24, 1964. This was given in Philadelphia and in New York—the first time ASIE moved away from Philadelphia for examination purposes. This examination was only for the CDS and thirteen were accepted and eleven passed.

Moving forward, ASIE held its first CAEM (now CIE-EM) examination on December 12, 1964. This was also conducted in Philadelphia and New York. There were eleven applicants and nine passed. Having made the necessary arrangements, ASIE

*Atlanta, Baltimore, Boston, Buffalo, Chicago, Cleveland, Dallas, Denver, Detroit, Houston, Indianapolis, Kansas City, Los Angeles, Miami, Milwaukee, Minneapolis, New York, Philadelphia, Pittsburgh, Portland, Richmond, Rochester, St. Louis, San Francisco, Seattle, Toledo, Washington and San Juan.

announced nation-wide examinations to be held on May 22, 1965. This time examinations were held for the CITM (now CIE-TM) and the QEM (now QIE-EM), and in addition to Philadelphia and New York, examinations were held in Chicago, Cleveland, Los Angeles, Spokane, and Oak Ridge, Tennessee. There were 46 who signed up for one of these four examinations and 39 passed. From the very beginning, it is apparent that ASIE has held close to recognised standards.

Having adopted a semi-annual schedule for examinations, the next date was November 20, 1965, when Toledo, Detroit, Milwaukee, Minneapolis, Miami and Baltimore joined. Despite the geographical expansion, the number who took the examinations was only 136 of whom 129 passed.

In successive examinations, the number of cities where they were held increased to the listing that appears in the footnote on pre-page.

The record of the semi-annual examinations shows a plateau of 30 or 40 entering each time an examination is conducted. Another interesting observation is that some one city suddenly attracts a number of examinations. One time it was New York, another time it was Denver, and so it goes.

SEMINARS

As a device for the benefit of its members, ASIE has been conducting seminars in Philadelphia ever since the beginning. These are two-hour meetings, dealing specifically with a given subject. These subjects are marine transportation, marine insurance, banking, correspondence, etc. A panel of speakers presents their particular views and ample opportunity is afforded for questions and answers.

ASIE is eager to have seminars offered in other cities. The membership in New York and Chicago is large enough to justify such an arrangement, but as of the present this has not been accomplished.

RESEARCH PAPERS

For all examinations except the CDS, one of the requirements is the submission of a research paper. The subject is either one that is selected from a list of topics submitted by the Society or it may be a topic that the applicant has selected and which has been approved by ASIE.

These research papers are made available for loan to our members and since this announcement was made in 1967 there has

been very active response. Many of these papers are case histories in which the author deals with a particular problem relating to his own company.

REGIONAL DIRECTORS

Due to rapid geographical expansion of the area in which ASIE operates, it soon became apparent that additional responsibility for operating the Society must be extended to other areas. This has been accomplished by the selection of Regional Directors, who at present are located in Boston, Buffalo, Chicago, Denver, Indianapolis, Los Angeles, Minneapolis, New York, San Francisco and San Juan. In this capacity, ASIE feels that it has provided a means of close affiliation with several sections of the US. The Regional Directors arrange examinations and encourage persons to apply for examinations. When seminars are offered outside Philadelphia, this is undoubtedly under the impetus of the Regional Director.

In conclusion, this is the story of one successful effort to professionalise the field of business administration,—and this is international business. Since the readers of *Foreign Trade Review* are interested in this field, they will be impressed by the story that is told here because it underscores the fact that no matter how qualified a person is he will always respond to a higher challenge if it is offered to him. As one who is in the centre of the operation of the Society, the author can say without fear of contradiction that it is most rewarding as well as challenging. It also demonstrates the difficulty of getting something of this kind under way. It requires tenacity and faith; and, if one holds out long enough, the fruits of his efforts are available.

Although the Society has had correspondence with several of its compatriots in India, we must stress that at the present state of our development we are in no position to offer examinations in any country other than the United States. We are, after all, the American Society of International Executives and we realise that we cannot become a world Society.

APPENDIX

CONTENTS OF ASIE EXAMINATIONS

CDS

- (1) Foreign trade terminology, (2) Payment terms and financing,
- (3) Knowledge of business terms in one foreign language—Spanish or French or German, (4) Understanding drafts and letters of credit,
- (5) Government foreign trade controls (US and foreign), (6) Export

shipping documents, (7) Export invoices and packing lists, (8) Export traffic procedures, (9) Marine insurance, and (10) Calculating c.i.f. quotations.

CIE-EM

(1) English business correspondence, (2) Foreign trade theory (general foreign trade course or book), (3) World geography (political and economic), (4) Sources of foreign trade information, (5) Reading knowledge of Spanish or French or German, (6) International sales promotion (direct mail, advertising, etc.), (7) Credit and financing, (8) Government foreign trade controls, (9) Shipping practices and procedures, and (10) Research paper.

QIE-EM

(1) International sales management, selection and training of foreign representatives and distributors; (2) Personnel and office administration, budgets; (3) Advanced credits, collections and financing; (4) Market surveys and sales forecasts; (5) Speaking or writing ability in Spanish or French or German; and (6) Research paper.

CIE-TM

(1) Government foreign trade controls; (2) Shipping practices and procedures; (3) General knowledge of freight rate structure and methods of booking and negotiation; (4) Warehousing and packing; (5) Import practices; (6) Forwarding selection of a foreign freight forwarder, an IATA agent or a consolidator; (7) Geography, good working knowledge of geography; (8) Terminology of international business; (9) Communications, letters, cables and other media; (10) Theory, a knowledge of foreign trade theory; (11) Language, reading knowledge of commercial terms in one or more languages, preferably Spanish; and (12) Thesis, a research paper of not less than 1,000 words.

QIE-TM

(1) International traffic department organisation, (2) Freight rate structure and negotiation, (3) Bulk shipment and chartering practices, (4) Marine insurance, (5) Language, and (6) Research paper.

CIE-F

(1) US Government foreign trade controls, (2) Foreign government controls, (3) Shipping practices and procedures, (4) Freight rate structure & tariff interpretation, (5) Relations with carriers, (6) Conference structure, (7) World geography, (8) Related international business terminology & interpretation, (9) Communications, (10) Foreign trade theory, (11) Language, and (12) Thesis.

QIE-F

- (1) Organisation, (2) Federal maritime regulation regarding licensing, (3) Duties of foreign freight forwarder, (4) Insurance, (5) Language, and (6) Thesis.

CIE-AF

- (1) Government foreign trade controls, (2) Relations with airlines, (3) Shipping practices and procedures, (4) Freight rate structure and use, (5) Airlines of the world, (6) Packing, (7) Insurance, (8) World geography, (9) Duties of air freight agent and consolidator, (10) Air freight forwarding company organisation, (11) Terminology of international business, and (12) Thesis.

QIE-AF

- (1) Organisation, (2) International air transport association and regulation of agents, (3) Duties of air freight agent and consolidator, (4) Insurance for air, (5) Airport operations, (6) Language, and (7) Thesis.

EXPORT POSSIBILITIES FOR INDIAN SPICES, 1968-76

By E.P.W. da Costa

ALMOST all India's export industries need a new look. This is partly because technology and standards abroad are changing. It is more so because our "traditional" exports are excessively rooted in the past. They cry out for modernisation both to reduce costs and meet "modern" standards. That is, in the field of spices, the hoariest of our exports, the new challenge and the new opportunity.

A new spices study, among others, recently undertaken was designed to assess all relevant factors both in supply and demand. Its method was inter-disciplinary, evaluating from several approaches the factors in export such as production, consumption, comparative prices, taxation including tariff barriers abroad, packaging, processing and transportation, quality control, Government controls and regulations, pattern of distribution, methods of export promotion as in operation at present, research and product diversification, and the pattern of investments. This design, as of the other commodity surveys sponsored by the USAID and the Ministry of Commerce, has been a means of some "fresh" thinking in a well-worn field.

TARGETS FOR INCREASED EXPORTS

In the case of all India's major spices—pepper, cardamom, chillies, ginger and turmeric—the waves of history define, so to speak, the ranges of both past, and likely future short-period performance. In fact, any realistic targets for 1971-72 must grow out of an analysis of peak performances of Indian exports in the last twenty, but more effectively, in the last ten years. Where were these peaks? Why have we lost ground and where? And, most important of all, precisely how great was the fall in 1967, both in volume and value in the case of each of the spices studied? The answers to these questions might be appropriately described as "Operation: Lost and Found".

These facts have, by now, been largely collected, analysed and interpreted as part of our study. But we cannot merely by historical studies recover the peaks which, for different reasons in the case of each spice, have thus been described. Reclimbing

the peaks calls for quite different disciplines in the study of the apparatus of production, both at home and abroad, and in the competition which we face, which, in important respects, is very different today from what it was when we reached our own summits in these spices. If the identification of the peaks in time is historical, the reattainment of these peaks is a multi-disciplinary exercise in the fields of basic agricultural practices, plant and plant disease research, economic research into costs and productivity opportunities, organisational factors in marketing, elements in fiscal policy and what seems almost more important than all for exports, the maintenance of standards—both technical and commercial—more rigidly demanded than ever before. Operation: Recovery which is a strategy for 1971-72 is conceived against the whole spectrum of change which must be initiated to ensure success in an area where strategies for exports have never been integrated all the way from the producer to the buyer in a foreign land.

The exercise "Operation: Recovery", if it attained its objective, would certainly increase India's foreign exchange earnings by a half and would, therefore, justify itself as an effective short-period strategy. It would not, however, provide either an adequate challenge or commercial opportunity to Indian nationals to develop the unique advantages which Providence has placed in our hands. Why, with some of the best spice lands in the world, has India a lower yield, and consequently, higher costs per acre than our main competitors? Patterns of new cultivation and commercial operation must be matched over the longer period of the structure of consumption over about a decade in the great consuming countries. Here the quantitative framework must, necessarily, be less definite. But it would spell defeat if, on this account, the will to build supplies adequate to foreign markets were not generated in the next three years. A long-term strategy, more exactly than anything hitherto attempted, has to be initiated at the same time as we pursue our 1970-71 minimum achievement targets.

Partly because the peaks in volume have been previously attained, one can plausibly argue that productive capacity to support a similar performance in the future in the case of all Indian spices already exists. In other words, in its production component, we are operating in the short term, till 1970-71, on a proved prototype.

It is quite otherwise for the longer period ending 1975-76. Here projections are made, while inevitably reflecting past performance, so well above the peaks. Productive capacity does not currently exist to support these targets and one of the major findings of this study is to the effect that it cannot be created except

by a supreme effort to integrate all the necessary resources: research knowledge, skilled research application to production, new monetary investment, integration of areas of the trade still wide apart on both production and price, and concentration on standards in demand abroad. Neither the appropriate production nor the export targets presented on page 282 can operate without a large infusion of new management of the entire field. The creation of a new framework of operation involves also experimentation in the administrative field: some trial and error is certainly involved. New strategies are also proposed in regard to particular spices in each market. Unlike the targets for 1970-71, which are manageable with relatively little uncertainty, the longer range development and export programme calls for a much more challenging display of both enterprise and intellectual resources. This third operation may, therefore, in view of its unfamiliar demands be described as "Operation: Discovery". We literally have to find "new" ways to reduce costs and to improve quality. This is largely on the side of supply or production.

RESEARCH, MODERNISATION AND ORGANISATION

Whereas "Operation: Recovery" is considered within reach on the basis of moderate adjustments in the existing techniques of production and trade, "Operation: Discovery" as already indicated will call for much more effort both in the field of research and modernisation as also in the field of organisation of the spices industry.

The research institutions will have to tackle specified problems spice-wise. In the case of pepper, increased attention will have to be paid to the eradication of wilt disease. Immediate attention will also need to be paid to scientific evaluation of the new vine which has been developed under the name of Panniyur I. It is surprising that though this variety of pepper shows good prospects by way of increased production, its pepperine content and volatile oil content have still not been measured.

In the case of cardamom, another perennial spice crop, the katte disease is taking a heavy toll. This, though not the only explanatory factor of declining production of cardamom, is considered to be a major factor. While prevention, containment and eradication of this disease should be an important concern of the research organisations in the field, it is at the same time important that wherever eradication of the disease is not possible, attempts at growing new strains which may be katte-resistant should be made.

Research institutions also have a major obligation in providing additional information in the case of annual crops like ginger,

TARGETS FOR EXPORTS; VOLUME AND VALUE: 1971 & 1976

Spice	Volume in peak years (in tonnes)	1967-68		1970-71		1975-76	
		Volume (in tonnes)	Earnings in foreign exchange (Rs crores)	Volume (in tonnes)	Earnings in foreign exchange (Rs crores)	Volume (in tonnes)	Earnings in foreign exchange (Rs crores)
Pepper	26,000 (1965-66)	24,868	13.02	30,000	18.00	36,000	21.60
Cardamom	2,310 (1963-64)	1,536	7.16	2,300	9.66	2,650	11.10
Ginger	9,889 (1956-57)	3,823	1.28	9,000	2.30	13,000	3.30
Turmeric	13,150 (1956-57)	5,730	1.32	16,500	4.10	20,000	5.00
Chillies	12,086 (1963-64)	6,986	2.05	15,000	4.40	18,000	5.30
Coriander seed	8,393 (1961-62)	2,538	0.44	8,500	0.90	15,000	1.80
Aniseed	643 (1963-64)	7	Neg.	650	0.10	800	0.10
Cassia	79 (1960-61)	117	0.04	200	0.08	300	0.12
Garlic	2,036 (1961-62)	1,018	0.18	2,000	0.30	2,500	0.40
Tejpata	696 (1964-65)	181	Neg.	400	0.01	500	0.02
Nutmeg & mace	11 (1966-67)	5	Neg.	15	0.01	25	0.02
Curry powder & paste	1,794 (1962-63)	1,250	0.51	2,500	1.00	4,000	1.50
TOTAL			26.00		40.86		50.26
Other spice seeds		3,400	0.98	6,000	1.50	8,000	2.00
GRAND TOTAL			26.98		42.36		52.26

turmeric and chillies. In the case of ginger, an effort has to be made to produce a variety as good as the highly reputed Jamaican ginger, on a commercial scale. Areas in Assam appear to lend themselves more profitably to the improved variety. If in fact we succeed in producing a variety of ginger that is equal to the Jamaican ginger in quality, colour, fibre and flavour, we may get entry into the hitherto reserved market of the USA or Canada.

Happily, research on turmeric at the Turmeric Research Station at Pedapalam (Andhra Pradesh) has resulted in selection of a Dugirala type turmeric, which has been identified with an increased yield of 10 per cent. It is also tolerant to "leaf spot" when isolated. If this turmeric is equal, quality-wise, with the best turmeric already grown, we may succeed in achieving a major breakthrough in turmeric production.

In the case of chillies, both investment and human ingenuity are involved in identifying varieties which are most desired abroad. Some effort needs to be devoted also to developing chillies of the right colour and of the right pungency and heat so that these pass the Scoville test in use by ASTA (The American Spice Trade Association). A market also exists for chilli powder or chilli sauce but in the case of these processed chillies, there is a danger of infestation. This danger is so constant, that it may be that a major entry here is not worth the risk.

It is obvious that research by itself cannot accomplish much. This, in order to yield results, has to be transferred to the farmer in the field. This involves both investment in modernisation and greater organisation. Investment opportunities exist, in particular, in manufacture of processed spices particularly oleoresin manufacture based predominantly on pepper. Opportunities also exist in new cardamom cultivation based on knowledge of both seed and plant protection and soil quality; improved seeds and improved varieties, for supply to the whole of the spice industry; for establishing commercial testing laboratories both at Cochin and Bombay Ports operating on self-financing and perhaps profit-making basis; and central product cleaning and packaging units so that exporters can be assured of quality standards without all making severally investments of their own for cleaning machines.

The increased research effort as also the investments that may be made in this sector of the economy, will need to be supported and strengthened by better and more coordinated administration at the industry level, at the trade level, and, most important, at the level of Government. It is considered desirable that at the industry and trade level an association on the lines of the American Spice Trade Association should be formed. This association, while

looking after the interest of the spices industry both at the production and the trade level, should form specific committees to look into particular problems facing the industry. For example, it should have a committee which should keep close liaison with the Government in matters of standards and quality control. Another wing of the association may be entrusted with the task of research and development. Likewise, a third committee may take up the task of publicity abroad, particularly on advertising our improvements in quality.

The new Central control of the industry recommended will be primarily concerned with research in production and testing, currently the province of the Ministry of Food & Agriculture. There is, however, also an area of unnecessary intervention by other Ministries, notably the Ministry of Health, *via* the Prevention of Food Adulteration Act. Under this Act, for example, the percentage of light berries of pepper allowed to be included in any pepper trade is limited to 2 per cent. This is based on an erroneous understanding of the nature of light berries which carry no injurious element. The provision has been copied mechanically from an old Food and Drug Regulation limitation in the United States designed to make more "bold" varieties available in that country. Currently, India is short of "bold" varieties for both the United States and the Italian markets. The existing redundant limitation on light berries internally greatly limits our capacity to supply. For an exporting country, there should be no restrictions whatsoever.

It is in these areas of research application, coordination of trade agencies, improvement of standards, centralised administration and in a forward-looking sales approach that a major emphasis needs to be placed. By the same token, there needs to be a single-minded central direction of all elements in the policy—particularly research and application of standards—for the necessary fusion of currently dissipated effort to achieve the high production goals envisaged. Given this powerful direction, it is most likely that we will double our foreign exchange earnings from spices by 1976.

STRUCTURE OF WORLD CONSUMPTION

There is no general relation between income and the consumption of spices. Indeed, some quite extraordinary paradoxes exist in the correlation of income with such consumption in various countries. Thus, a developing country, Ceylon, with an income of less than \$130 per head consumes more chillies per capita than any country in the world. The figure for consumption in Ceylon

is 3,316 grams per head against 50 grams per head in the USA with a per capita income of \$2,893 per head. It might be added that Indian consumption is of the order of 800 grams per head, about 16 times that of the USA. So far as world trade is concerned, Ceylon also dominates the field with well over half of the world's trade in terms of imports. This is not the only case where national income and national consumption are unrelated.

In the case of cardamom, consumption in Saudi Arabia at 62 grams per head and in Kuwait at 564 grams per head exceeds that in every affluent country including Sweden and Finland, which have had a long use of cardamom seed in confectionery. In the case of ginger, the Middle East consumption per capita is higher than that in other "affluent" or high income countries. This also applies to turmeric where consumption per capita is again higher in Ceylon than any other country except India, which is very much the greatest producer.

There are, however, fairly steady associations of consumption of spices with income growth in the same country. Indeed, there is practically no case discernible of a country's suddenly changing its eating habits to the exclusion of spices. There are apparent fluctuations as between two years largely to be explained by variation in stocks or inventories but the general pattern is one of growth of each market in terms of population accelerated by preferences of younger people.

Consumption, which concerns India, is reflected in the dominant variable of foreign exchange earned. This has two components: firstly, volume; secondly, price. In the case of pepper and cardamom, price variations since 1951 appear on balance more important than volume changes. On the other hand, an increase in earnings over the long haul depends nearly as much on volume as on price. For this study, price must be assumed less under our control than volume. Therefore, production problems are elevated to the first place in the new strategies proposed. Price strategies, however, are only next in importance. They need to be far less global if India's policies are to be effective. Much of our failure has been due to unwise dissipation of effort.

CHARACTER OF COMPETITION

Another major observation, which emerges from the study of our share of markets abroad, is to the effect that, in each major spice, although there are a number of producers and a very large number of consumers, India's foreign market is really limited by only one major competitor in each case. In the case of black pepper, this is Lampong (Indonesia); in the case of cardamom,

this is Guatemala; for ginger, it is Sierra Leone; for turmeric, it is Pakistan; and for chillies, it is Japan. This points both to a limitation of the area of attack and of the objectives of export strategy.

It is broadly true that if we could deal successfully with the competition of one country's produce in each case in one or two major markets where that country's produce threatens our market, the viability of the targets proposed could be ensured. In the case of pepper, the market threatened is the United States; in the case of cardamom, it is Bahrain and Sweden; in the case of ginger, it is the Middle East and the UK; in the case of turmeric, it is Ceylon and Japan; and in the case of chillies, it is Ceylon and the United States. The instruments of both offence and defence are only two: *one*, quality standards of the importing country and *two*, a price even with our leading competitor. These general considerations can now be illustrated.

SPECIFIC STRATEGIES FOR EXPORT

For some years, India has been obliged to withdraw, partially or wholly, from a number of markets because of the relative price level of its spices *vis-a-vis* the price levels prevailing in other competing countries. This has in many cases happened in spite of an overall preference for Indian spices, particularly for pepper, cardamom and turmeric. In the case of black pepper, currently we are over-priced in relation to Lampong in the US market by about a third of the prevailing international price. In the case of cardamom again, Guatemala has made some inroads into our markets largely on the basis of price differential though Guatemala cardamom, quality-wise, is considered inferior to some of the best quality cardamom available from India. Nigerian, Jamaican and Sierra Leone ginger have offered stiff competition to our ginger exports. Currently, Cochin ginger is priced about 25 per cent higher than the world price of Sierra Leone ginger which is only slightly inferior to Cochin ginger but is largely acceptable. Jamaican ginger, however, is also considered superior in quality than the Indian ginger. Here, therefore, our strategy of export has to be two-pronged; both on the prices front as also on the quality front. In the case of turmeric again, high prices have eroded some of our markets, particularly in Europe. Pakistan, Burma, China (Mainland) and Formosa have been the alternative suppliers. The competition has largely been in regard to prices though Indian turmeric is largely acceptable for its quality. In the case of chillies, however, the strategy has to be multi-faceted. Apart from bringing about competitive prices, particularly *vis-a-vis* Japan, in the US market, it is essential to

produce chillies with the desired colour and of specified quality which may be most acceptable in the foreign markets. These chillies will also have to be acceptable in regard to their chemical composition, particularly in regard to heat content.

In the new strategy for increasing exports of spices, provision will have to be made for support prices as also for buffer stocks. Markets exist currently for a world trade estimated in 1967 at 75,000 tonnes, with producing countries retaining about 20,000 tonnes for their own consumption. It is likely that something between 5,000 and 10,000 tonnes is excess being offered either spot or forward and this surplus accounts for the difference between a stable price of 37 or 40 cents per lb. c.i.f. New York and the current price for Lampong of 26 cents per lb. Apart from an agreement with Indonesia which would be welcome in any case, it is obvious that both India and Indonesia must hold buffer stocks so that their combined offerings do not at any time weigh too heavily on the US market. Similar buffer stocks may be brought into being whenever the supply position of particular spices improves and threatens the predetermined support price for different spices.

Another important element in export promotion has to be quality control, both at the level of production and at the level of exports. While much more research effort will need to be directed to the production of better quality spices, equal care and attention will have to be paid to the maintenance of quality in the course of growing. It is likely that, as in Japan, a greater integration between the producer, trader and exporter is called for in this country also. In the long run, this integration is inevitable both for increased production and increased exports. In the short run, an appropriate coordination between producers and exporters should be established so that our exports do not suffer for want of quality equal to the needs of our importers. Test laboratories, which need to be established at two important export points, i.e., Cochin and Bombay, should further see to it that nothing that is not of adequate quality leaves Indian shores. For this purpose, India must acquaint itself with laboratory tests as performed abroad particularly by the Food and Drug Administration of the United States and adopt these for purposes of approval of its own spices for export.

Because of the nature of organisation and also the size of production that is involved in selling packaged spices a major marketing effort to sell packaged spices is not likely to succeed except in collaboration with some established house of standing similar to, say, McCormicks of the United States. However,

there is scope in limited fields for selling packaged spices to particular groups provided care is taken in supplying exactly what the market desires. Examples are a small special plastic pepper mill used in Italy for departmental stores which sell Malabar or Tellicherry Bold: containers far more attractive than those used for Indian curry powder for markets such as Canada who accept an Indian blend in large quantities without further mixing. A special team from the Spices Export Promotion Council should visit the Departmental Stores in selected countries with new products thus packaged. This will have some publicity value: conceivably it could earn, perhaps Rs 25 to 30 lakhs of additional foreign exchange.

The effort for increased export will also have to be supported by improved publicity. The publicity campaign must have three major elements. Firstly, it should not enter into fields where buyers of our spices—grinders or processors or retail distributors—are already performing an adequate publicity programme. This has both an area and content constraint. Secondly, in view of the limitations of foreign exchange, our publicity must be confined to highly profitable areas of new sales opportunities. A general or prestige campaign for image-building is both wasteful and unnecessary except in respect of information on “standards”, that is, actual details of new levels of quality and cleanliness guaranteed to the foreign buyers by Indian Government regulation or guarantee. Thirdly, it must be conceived as a partnership in areas where a global pattern can be developed from specially proved techniques in a particular area. The proved prototype of ASTA’s sales promotion, for example, can be usefully introduced in areas where ASTA does not operate but we have a major interest. The Middle East appears at once as one such area.

IFC IN THE DEVELOPING COUNTRIES: A METHOD OF INDIRECTLY FINANCING FOREIGN TRADE

By James C. Baker

ONE of the many serious obstacles facing less developed countries is the shortage of foreign exchange these nations have with which to satisfy their demands from abroad. Many of these nations are unable to service the debt obligations often necessary as part of foreign aid from industrialised nations. Thus, they are unable to develop adequately as a result of the lack of foreign exchange.

Two means are possible by which less developed countries can increase their foreign exchange reserves without use of foreign trade restrictions. They can sell more goods abroad and/or expand production in those areas of high domestic consumer demand which are at present partially or wholly satisfied by imports. Thus, new production facilities can result in satisfying demand locally and possibly lead to increased exports.

However, with a shortage of private investment funds as well as foreign exchange, how can an LDC finance the development of its private enterprise? One possible method is project-financing assistance from the International Finance Corporation (IFC). IFC is the only international public financial institution which finances private enterprise projects in less developed countries *without government guarantee*. The projects must be located in member countries and only members of the World Bank are eligible for membership of IFC, because IFC is part of the World Bank Group.

The purpose of this paper is to analyse and delineate the role of IFC in financing projects in less developed countries, which will result in improved foreign exchange reserve positions of these nations as well as expansion of their industrial production. Two selected case studies, demonstrating such IFC project commitments, will be discussed in detail. These are the cases of Mahindra Ugine Steel Company Limited (MUSCO) located in Khopoli, near Bombay, India and NPK Engrais, SAT, located at Sfax, Tunisia.

INTERNATIONAL FINANCE CORPORATION

ORIGIN

The World Bank had begun operations in 1946 as an institution, whose principal objectives were assistance of war-torn and less

developed countries by means of capital loans for projects primarily in the public sector and which were guaranteed by the host government. By the early 1950's, a serious gap in development financing was recognised. The private enterprise sector, generally thought to be a dynamic factor in the economic development process, needed long-term investment capital and the World Bank was unable to furnish it because of its charter limitations. After several years of international debate, ratification was completed for the articles of agreement of an institution to be called the International Finance Corporation. IFC's capitalisation was to be \$100 million, contributed by member nations. The United States' share, \$35,168,000, was the largest.

PURPOSE

IFC's general purpose is:

to further economic development by encouraging the growth of productive private enterprise in member countries, particularly in the less developed areas, thus supplementing the activities of the International Bank for Reconstruction and Development (World Bank).¹

To implement this purpose, the Articles of Agreement required IFC to:

- (1) in association with private investors, assist in financing the establishment, improvement, and expansion of productive private enterprise which would contribute to the development of its member countries by making investments, without guarantee of repayment by the member government concerned, in cases where sufficient private capital is not available on reasonable terms;
- (2) seek to bring together investment opportunities, domestic and foreign private capital, and experienced management; and
- (3) seek to stimulate, and to help create conditions conducive to the flow of private capital, domestic and foreign, into productive investment in member countries.²

IFC performs several functions in implementing these objectives. In addition to financing industrial projects, IFC: (1) may underwrite shares issued by companies; (2) may encourage financial institutions in capital exporting nations to participate in develop-

¹IFC, *Articles of Agreement* (Washington, DC: IFC, 1956), p. 3.

²*Ibid.*, pp. 3-4.

ment projects by selling them investments from its own portfolio; (3) may finance private development finance companies, a type of development bank which is privately owned and whose capital is invested in local private enterprise; (4) appraises investment proposals submitted to the World Bank by industrial and mining companies; (5) advises the management of companies in which it has invested; and (6) assists these companies in drafting market surveys.

IFC's FINANCIAL RESOURCES

In addition to IFC's subscribed capital—\$99,929,000 in January 1967—the agency has other financial resources available. Earnings from its investments and sales from its portfolio are further sources. In addition, an amendment to IFC's charter in 1965 permitted IFC to borrow up to four times its subscribed capital from the World Bank, or up to \$400 million. IFC has already borrowed \$100 million under this charter change.

By selling its more seasoned investments during its first decade of operations, IFC received \$34.8 million.³ IFC has closed out investments amounting to \$21.5 million during this period.⁴ Interest and dividend earnings and net profits from its sales of investments, 1956-1966, have amounted to \$28,367,887.

USES OF FINANCIAL RESOURCES

The following principles, from its Articles of Agreement, guide its operations:

- (1) The Corporation shall not undertake any financing for which, in its opinion, sufficient private capital could be obtained on reasonable terms;
- (2) The Corporation shall not finance an enterprise in the territories of any member if the member objects to such financing;
- (3) The Corporation shall impose no conditions that the proceeds of any new financing by it shall be spent in the territories of any particular country;
- (4) The Corporation shall not assume responsibility for managing any enterprise in which it has invested;
- (5) The Corporation shall undertake its financing on terms and conditions which it considers appropriate, taking into account the requirements of the enterprise, the risks being

³IFC, *Annual Report 1965-1966* (Washington, DC: IFC, 1966), p. 12.

⁴*Ibid.*

undertaken by the Corporation, and the terms and conditions normally obtained by private investors for similar financing;

- (6) The Corporation shall seek to revolve its funds by selling its investments to private investors whenever it can appropriately do so on satisfactory terms; and
- (7) The Corporation shall seek to maintain a reasonable diversification in its investments.

IFC participated in financing projects whose estimated total cost amounted to \$675 million during the period 1956-66. This does not include \$14.1 billion of IFC commitments in private development finance companies. IFC's share in the industrial projects amounted to \$140 million net of cancellations and participations by other financial institutions; local sources invested \$330 million in these projects; and foreign investors committed \$205 million.⁵ Thus, nearly four dollars of investment from other sources has been contributed for every dollar of IFC investment.

DIVERSIFICATION OF INVESTMENTS

IFC made project commitments totalling \$172.4 million to 124 companies located in 34 member countries during 1956-66. By industry, 27.1 per cent of these funds have gone to companies in the iron and steel industry; 15.5 per cent to the pulp and paper industry; 12.8 per cent to the construction materials industry; 11.0 per cent to development finance companies; 9.9 per cent to the textiles industry; 7.0 per cent to chemicals; 6.1 per cent to food processing; and 10.6 per cent to other industries.⁶

Geographically, these investments were made to companies located in 34 countries. Latin American projects have received 58.3 per cent of project commitments; projects located in Asia and the Middle East have received 18.2 per cent of IFC's invested funds; whereas African projects have received 13.3 per cent and European companies have received 9.6 per cent of IFC's committed funds. A small amount has been committed in Australia. In recent years, African and Asian projects have received increasing attention from IFC.⁷

IFC's investments may take a number of forms. Originally, the agency could not make direct equity investments. A venture

⁵IFC, *Annual Report 1965-1966*, op. cit., p. 8.

⁶*Ibid.*, p. 5.

⁷*Ibid.*, p. 4.

type arrangement was often made whereby IFC would make long-term loans with a right to share in the profits of the company. Other loans carried an option to subscribe to share capital and some loans were convertible into capital shares. IFC could not exercise these rights but could sell them to other private investors. Otherwise, all commitments consisted of medium-term loans at rates of interest prevailing in the host country at the time of the commitment.

By 1961, it had become clear that the inability for IFC to directly acquire share positions in projects hindered its operations. Besides, the types of securities IFC was using were confusing and unfamiliar to foreign investors. Thus, a charter amendment was proposed and approved in 1961, permitting IFC to make its first straight equity investment in Fabrica Espanola Magnetos, SA (FEMSA), a leading Spanish manufacturer of automotive electrical equipment. Since then, IFC has made very few project commitments without taking an equity position.

UNDERWRITING ACTIVITIES

Because of the near non-existence in most LDCs of a viable capital market, equity funds may not be available for new business ventures. One important function of an investment bank is the underwriting or guarantee of share issues made by small or little-known companies. IFC performs this function by putting its stamp of approval on such issues. This has encouraged leading foreign financial institutions to participate in IFC-financed projects. Among these institutions have been Deutsche and Dresdner Banks of Germany, Banca Commerciale Italiana, The Chartered Bank of London, the Kuwait Investment Company, Morgan Guaranty Trust Company of New York, Chase Manhattan Bank, and Bank of America.

As of June 30, 1966, IFC's underwriting activities totalled \$25.1 million in 11 companies located in 10 countries. As of that date, approximately 70 per cent of this total had been subscribed to by other investors.⁸ In June 1962, IFC undertook its first underwriting commitment with Credito Bursatil, SA, a Mexican investment bank, when a syndicate was formed to underwrite new shares issued by Compania Fundidora de Fierro y Acero de Monterrey, SA, Mexico's largest privately owned steel company. IFC underwrote shares in Fundidora valued at \$2,942,500.⁹ Since then, IFC has underwritten further share issues made by Fundidora in 1964 and 1966, totalling over \$11.8 million.

⁸ IFC, *Annual Report 1965-1966*, op. cit., p. 10.

⁹ IFC, *Sixth Annual Report 1961-1962* (Washington, DC: IFC, 1962), pp. 10-11.

MAHINDRA UGINE STEEL COMPANY LIMITED (MUSCO)

With nearly a half-billion inhabitants and primarily an agricultural economy, India suffers from the problem of overpopulation. India's foreign exchange reserves are quite limited, because large imports of food are required. Output of common steel doubled between 1959 and 1962. The increase in industrial production likely to be programmed for the Fourth Five-Year Plan will increase considerably the steel requirements of the Indian economy.

The Government of India gave high priority to developing the means of production of alloy steels to complement the common steel output. Imports of alloy steel had increased and foreign exchange reserves were needed for these imports even though controls were placed on such imports. Thus, Indian and French industrial interests were encouraged to plan the construction and operation of an alloy steel plant at Khopoli, located 65 miles from Bombay in the State of Maharashtra. The plant was designed to serve the Bombay industrial area, which is one of the leading industrial centres in India.

A new company, the Mahindra Uginé Steel Company Limited (MUSCO), was formed for the purpose of building and operating the plant. Its Indian sponsor was Mahindra and Mahindra Limited, of Bombay, a manufacturer of jeeps, trailers, agricultural tractors and implements, diesel engines, and textile machinery, as well as an importer and distributor of steel. The French sponsor was Societe d'Electro-Chimie, d'Electro-Metallurgie et des Acieries Electriques d'Uginé (Uginé), a principal alloy steel maker. A subsidiary company, Societe Inde-Uginé, has been formed to hold a participation in MUSCO by Uginé together with Compagnie Financiere de Suez and the Comptoir National d'Escompte de Paris.

The new plant was designed to have an annual capacity of 18,000 tonnes of finished alloy steel products with future expansion possible; however, the finished plant was able to produce 24,000 tonnes and can be expanded to 36,000 tonnes capacity. MUSCO began production in 1966.

Financial requirements of the project amounted to Rs 65 million (approximately \$13,650,000 at the exchange rate existing at that time) half of which was to be financed by long-term loans and the remainder by an initial issue of Rs 30 million of common and preferred shares, and Rs 2.5 million in suppliers' credits. The financial breakdown is given in the following table.

TABLE
INITIAL FINANCIAL PROGRAMME FOR MUSCO

(Rupees '000)

Share Capital

Common Shares:

IFC	4,000
Indian sponsors	6,150
Foreign sponsors	4,150
Indian public and underwriters	10,700

Preference Shares:

Indian institutions	5,000
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TOTAL EQUITY	30,000
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Long-Term Loans

ICICI	6,500
IFCI	15,000
IFC	11,000
Suppliers' credits	2,500

TOTAL LOANS	35,000
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TOTAL	65,000
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SOURCE: International Finance Corporation, *Eighth Annual Report 1963-1964* (Washington, DC: International Finance Corporation, 1964), p. 23.

IFC also made a contingent equity investment of \$300,000 if an additional share issue might be needed because of underestimated costs. Thus IFC's contribution amounted to slightly less than one-fourth of the total project cost consisting of (a) the loan of \$2.31 million, (b) a subscription to shares whose equivalent value was \$840,000, and (c) the standby arrangement of \$300,000, all totalling \$3,450,000.

As is shown in the table above, two sources of MUSCO financing were Indian institutions. The Industrial Finance Corporation of India (IFCI), a government-sponsored institution, supplied loan capital amounting to Rs 15 million. Also, the Industrial Credit and Investment Corporation of India (ICICI), a privately-owned development finance company, loaned MUSCO Rs 6.5 million.

The conditions of the IFC investment are typical of the institution's financial terms.¹⁰ The rate of interest on the loan is 7 per cent. The loan is repayable in 20 semi-annual equal instalments. MUSCO has to pay IFC a semi-annual commitment charge of one per cent per annum on the principal amount of the loan undisbursed. The financial assistance to MUSCO by IFC relates to the construction, equipment and operation of, and provision of working capital for, a plant with an estimated annual production of 24,000 tonnes of finished tool, alloy, and special steels and related products.

Under the investment agreement, IFC subscribed, at par, to 400,000 shares of MUSCO common stock. The shares were subscribed to in the ratio of 20,000 shares for each \$115,500 of disbursement under the loan investment.

IFC has encouraged participation by other financial institutions in this investment. The Continental International Finance Corporation, a subsidiary of the Continental Illinois National Bank and Trust Company of Chicago, participated in the investment to the extent of approximately \$150,000.

An evaluation of the progress of MUSCO is difficult to make. Construction in earnest began in 1965.¹¹ During the first year, a rolling mill, a forge, and a shipping building had been built. Buildings for melting and heat treatment as well as for finishing were nearing completion in 1966. Other ancillary buildings have been completed. Test runs for rolling of alloy steel were begun in late 1966. Orders by indigenous importers have been placed with MUSCO and the Government of India will probably limit imports of the type steels to be produced by MUSCO.

The original estimated total cost of the project was exceeded by several million rupees. However, the plant will result in large foreign exchange savings because of the lower requirements for special alloy steel imports. These savings have been estimated at Rs 60 million annually when the plant is run at full capacity.¹²

NPK ENGRAIS, SAT

In 1962, a leading Swedish producer of fertilisers, Aktiebolaget Forenade Superfosfatfabriker (Forenade) of Helsingborg,

¹⁰"Mahindra Ugine Steel Company", *Monthly Newsletter of the Indian Investment Centre*, V (February 15, 1968), 6.

¹¹Derived from correspondence from P.O. Mistry, Secretary, MUSCO, dated July 13, 1967.

¹²"Mahindra Ugine Steel Company", *op. cit.*, p. 6.

Sweden, decided to sponsor a new Tunisian company, NPK Engrais, which would manufacture triple superphosphate fertilisers. The new plant was located at the Port of Sfax on the Gulf of Gabes, about 150 miles south of Tunis. The plant, designed to produce 150,000 tonnes annually, was built next to docking facilities at Sfax, a terminal for a railway from interior rock phosphate mines. The city is the leading port for shipments of Tunisian phosphate.

Forenade applied for financial assistance from IFC. An IFC study resulted in a few significant changes in the original proposal. First, IFC proposed that the new company build its own sulphuric acid plant using imported sulphur, instead of importing the finished product, thus giving the new company a cost advantage. Forenade agreed and IFC persuaded Freeport International Inc., a financial investment subsidiary of a leading American sulphur producer, to participate in the investment. Secondly, IFC suggested that Forenade arrange to sell the bulk of NPK's output to Swedish purchasers on a long-term basis. The remainder would be exported to African and Asian countries. Thus, sale of NPK's output would be assured.

The appraisal by IFC resulted in increased project costs. The total initial cost of NPK was \$14.2 million. IFC agreed to make its first commitment in North Africa by investing \$1.5 million in NPK shares and lending \$2 million at 7 per cent for 7 years. Forenade agreed to purchase \$3.5 million NPK shares and to lend the company \$2,150,000. Freeport International bought \$1 million of shares and made a \$600,000 loan to the project. A unique feature of the financial arrangements was that each of these three investors agreed to reserve one-tenth of its NPK stock for sale to private Tunisian investors at par. The remaining portion of the capital needs was obtained through suppliers' credits and other loan sources.

As usual, IFC sought outside financial participation. Approximately \$1 million of IFC's loan and share commitments were taken by American and foreign financial institutions. Laidlaw Securities Limited of Canada, a subsidiary of Laidlaw and Company of New York, subscribed to \$154,000 of IFC's share commitment in NPK. Algemene Commerciele Associatie N.V., a Dutch banking house affiliated with Hambros Bank of London, subscribed to \$100,000 of the NPK shares held by IFC. New World Development Corporation Limited, an affiliate of the Philadelphia National Bank, took \$100,000 of the shares and \$286,000 of the IFC loan commitment to NPK. Bank of America NT & SA and Svenska Handelsbanken, a Swedish bank, took equal parts totalling \$286,000 of the IFC loan commitment to NPK.

The company began operations in 1964, almost a year ahead of the original schedule. The plant should contribute economically to Tunisia by expanding the use of an important Tunisian natural resource and the exports of superphosphate fertilisers are contributing to Tunisian foreign exchange reserves. In addition, nearly 400 Tunisians have been employed by the new enterprise and a technical training programme is being maintained by NPK to advance the technical, administrative and managerial skills of the employees. Finally, local investors are beginning to buy NPK shares in order to participate in the new enterprise.

CONCLUSIONS

These cases demonstrate the successful implementation of several of IFC's objectives and functions. In both cases, IFC has promoted joint arrangements between business interests of two or more nations. In the case of MUSCO, French and Indian interests have been combined to achieve a manufacturing facility which will enable India to reduce its imports of special alloy steels and, thus, save needed foreign exchange for other more pressing needs. In the case of NPK Engrais, Swedish, Tunisian and American interests were combined to implement a project leading to manufacture of a product for export by Tunisia, thus enabling the Tunisians to gain foreign exchange necessary for financing imports of high priority goods such as foodstuffs.

In both cases, IFC demonstrated its ability to promote the successful implementation of projects in developing countries where entrepreneurial capacity is in short supply. The IFC was able to do this without government guarantee. In the case of NPK Engrais, IFC's capacity of engineering and marketing know-how resulted in significant modifications of the original project proposal which led to a more successful operation.

Finally, IFC has demonstrated in these two cases, as well as in all its project commitments, that a multinational public institution can be of tremendous value in assisting the industrialisation of the developing nations. The expansion of IFC's operations will result in a catalyst, which will greatly accelerate growth in the private sector of these countries.

IMPORT SUBSTITUTION AND FOREIGN EXCHANGE SAVING: CASE STUDIES OF PRIMARY ALUMINIUM AND RAYON

*By V.V. Desai**

DEVELOPMENT plans with the policy of import substitution envisage growth of import substitute industries with the idea that the availability of their output would replace imports and lessen pressure on foreign exchange resources. It is now recognised that the import substitute industries themselves have import requirements and, therefore, their contribution to the country's foreign exchange resources is limited to the extent to which they bring about net foreign exchange saving. The present study attempts to estimate the net foreign exchange saved by two of India's more prominent import substitute industries, namely, aluminium and rayon.

METHODOLOGY

Gross import (and foreign exchange) saved by the industry is equivalent to its output valued at c.i.f. price of the competing imports. The various direct and indirect import needs of the production are grouped into "primary" and "secondary" imports. Primary imports consist of direct and indirect inputs of raw materials, whereas "secondary" imports consist of other imported requirements like plant and machinery, technology and capital. The ratio between the primary imports and the gross import saving is termed as a "primary import dependence" of the output and is assumed to approximate, though roughly, the progress of import substitution in the structure of production of the commodity. The difference between the two is regarded as "net import saving" and represents mainly the effect on the merchandise imports. The sum of "primary" and "secondary" imports constitutes the total foreign exchange requirements of the output. The ratio between this and the gross import saving indicates the "total foreign exchange dependence" of the output. The difference between the two gives the magnitude of "net foreign exchange" saved. The ratio between the "net" foreign exchange saved and the total foreign exchange

*The author is grateful to Prof. (Miss) K.R. Ranadive and Prof. D.T. Lakdawala for their comments and suggestions on this paper.

used for the purpose indicates the "foreign exchange productivity" of the foreign exchange used in the project.

The various foreign exchange costs incurred by the two industries in each of the seven years, 1957-58 to 1963-64, are compiled from the published sources, wherever possible. In respect of some of the costs, however, broad facts and the information supplied by the persons and/or organisations concerned with the industries have been used to arrive at certain workable estimates.

GROWTH OF THE TWO INDUSTRIES

Both the industries have shown dynamic expansion during the first three Five-Year Plans. Production of aluminium has increased from less than 4,000 tonnes at the beginning of the Plans to over 75,000 tonnes by the end of the Third Plan. Rayon production also has increased from about 2.5 million kg. to over 75 million kg. during the same period. Further, despite the multi-fold expansion in the consumption, they have been able to keep the imports low to a very great extent. Both the industries, therefore, can claim to have achieved substantial import substitution.

Before proceeding further, two important limitations of this study should be noted:

- (a) Aluminium industry in this study includes only the primary aluminium. Further, its contribution *via* replacing other imported materials like copper has not been taken into account.
- (b) Rayon industry includes only the yarn and fibre making. By-products of the industry are thus excluded. These two are likely to underestimate the foreign exchange contribution of the two industries. However, it is felt that they are not significant enough to affect the overall validity of the results.

MEASUREMENT OF NET FOREIGN EXCHANGE SAVED BY ALUMINIUM INDUSTRY

Table I on the next page gives the necessary data for aluminium industry. Gross Import Saving (GIS) shown in column 1 is obtained by valuing the output of primary metal at c.i.f. price. Column 2 gives figures of GIS (GIS^a) obtained by aggregating the c.i.f. values of individual components of the total output. In view of the price differentials among the various components, the first measure, which ignores these differences, underestimates the contribution of the industry. On the other hand, to find out the primary import dependence of output, GIS as given in column 1-

TABLE I
NET FOREIGN EXCHANGE SAVING OF ALUMINIUM INDUSTRY

Year	Gross import substitution GIS (Rs lakhs)	Gross import substitution ^a materials GIS ^a (Rs lakhs)	Imported raw materials (Rs lakhs)	Other foreign exchange costs (secondary imports) (Rs lakhs)	Total foreign exchange costs (3+4) (Rs lakhs)	Primary import dependence of output (3/1)%	Net import substitution (1-3) (Rs lakhs)	Net foreign exchange saving in the industry (2-5) (Rs lakhs)	Total import dependence of the industry (5/2)%	Net foreign exchange productivity (8/5)%
	1	2	3	4	5	6	7	8	9	10
1957-58	195	364	142	41	183	73	53	181	50	0.99
1958-59	206	379	127	46	173	62	79	206	46	1.19
1959-60	433	704	209	86	295	48	224	409	42	1.39
1960-61	453	734	191	101	292	42	262	442	40	1.51
1961-62	457	744	202	180	382	44	255	362	51	0.95
1962-63	878	1,128	242	243	485	28	636	643	43	1.33
1963-64	1,381	1,759	256	297	553	19	1,125	1,206	31	2.18
TOTAL		5,812	1,369	994	2,363		2,634	3,449		

^aOutput valued composition-wise.

is relevant, because primary imports are not likely to enter the product once the metal is produced. The primary import dependence, therefore, shows the size of immediate imports required to produce the metal in a given set-up at a particular point of time. To obtain net foreign exchange saved and the foreign exchange productivity of the industry, figures from column 2 are used, because the value of primary output at c.i.f. prices underestimates the foreign exchange saved. Column 3 gives the imported raw materials which include, besides the imports by the firms themselves, the imports by others for the firms. Column 4 gives all other foreign exchange costs. All these foreign exchange costs may not represent actual payments in the year to which they are attributed. Rather, they represent the magnitude of foreign exchange costs consequent upon producing a certain volume of output in a particular year.

PRIMARY IMPORT DEPENDENCE OF ALUMINIUM PRODUCTION

From Table I, it can be seen that as against sevenfold (col. 1) increase in gross import savings, raw material imports have less than doubled. As a result of this, we find a substantial expansion in the net import substitution (nearly 22 times) (col. 7). This is the direct result of building up appropriate alumina capacity which had always lagged behind the expansion of smelter capacity. This is reflected in the imports of alumina per tonne of metal produced, which has gone down from 0.6 tonne in 1960 to 0.1 tonne in 1963. In addition to this, other raw materials, viz., coke, pitch and, to some extent, caustic soda, are being made available indigenously in increasing quantities. This overall increase in the indigenous availability of raw materials has resulted in substantial reduction in the import dependence of production, which has gone down from 73 per cent in 1957-58 to 19 per cent in 1963-64 (col. 6). This development is quite impressive and has contributed significantly to the process of import substitution.

"OTHER" FOREIGN EXCHANGE COSTS IN ALUMINIUM INDUSTRY

On the other hand, as we turn to "other" foreign exchange costs, we find that there is a steady and substantial rise in their absolute size, though in relative terms they continue to form about 20 per cent of the value of gross import saving. However, in relation to GIS^a (col. 2), their importance has been increasing. This increase is striking when contrasted with the substantial decline in the relative importance of raw material imports. The significant implication of the divergent behaviour of the raw material imports and other foreign exchange costs is that while we have been able to make substantial progress in substituting inputs which are based on natural resources and whose exploitation is relatively easily

manageable, in the case of technological and skill-based inputs we have made no progress at all. These "other costs" would decline only when we can produce at least a substantial proportion of the plant and machinery needed so that the royalty and other service payments would be reduced. This would, of course, require more time and effort and hence should be treated as a long-term, second phase of import substitution in the production of the commodity. Yet the importance of this development would be realised when we recall that after a certain point, comparative advantage does not depend so much on the differences in the natural resource endowment but on the differences in the skills, technology, etc. Further, it is also necessary that the amounts of foreign capital and terms on which it is secured should be given serious consideration from a long-run point of view, because a good part of these other foreign exchange costs consists of the dividends to foreign investors.

As a result of the increase in the other foreign exchange costs, the total import dependence of the industry declined from 50 per cent to 31 per cent only (col. 9) as against the decline in the primary import dependence of the production from 73 per cent to 19 per cent (col. 6).

NET FOREIGN EXCHANGE SAVED BY ALUMINIUM INDUSTRY

However, the net foreign exchange saved has risen very sharply mainly because of the increasing indigenous availability of raw materials. Column 8 indicates that the amount of net foreign exchange saved has risen nearly seven times while total foreign exchange spent to secure this foreign exchange saving rose only three times. This, in other words, means that the capacity of a unit of foreign exchange used to save foreign exchange has increased during the period. We have rather crudely termed this as "foreign exchange productivity" of foreign exchange used. From column 10 we find that at the beginning of the period, a dollar used in the aluminium industry produced 1.99 dollars worth of output, giving net productivity of 0.99. As against this, by the end of the period, the same resulted in producing 3.18 dollars worth of output, giving net productivity of 2.18.

MEASUREMENT OF NET FOREIGN EXCHANGE SAVED BY RAYON INDUSTRY

Tables II (p. 304) and III (p. 305) give data on the various items for rayon yarn and staple fibre production respectively. Column 1 gives the output produced at c.i.f. price, which equals the gross import saving by the industry. Column 2 gives value of the raw materials imported and column 3 the other foreign

TABLE II
NET FOREIGN EXCHANGE SAVING OF RAYON INDUSTRY (YARN ONLY)

Year	GIS (Rs lakhs)	Imported raw materials (Rs lakhs)	Other foreign exchange costs (secondary imports) (Rs lakhs)	Total foreign exchange costs (2+3) (Rs lakhs)	Primary import dependence of output (1/2)%	Net import substitu- tion (1-2) (Rs lakhs)	Net foreign exchange saving in the industry (1-4) (Rs lakhs)	Total import dependence of the industry (4/1)%	Net foreign exchange producti- vity (7/4)%
	1	2	3	4	5	6	7	8	9
1957-58	534	135	172	307	25	399	227	57	0.7
1958-59	739	253	217	470	34	486	269	64	0.6
1959-60	831	268	241	509	32	563	322	61	0.6
1960-61	1,044	314	290	604	30	730	440	58	0.7
1961-62	1,179	569	343	912	48	610	267	77	0.3
1962-63	1,443	631	439	1,070	44	812	373	74	0.4
1963-64	1,719	820	444	1,264	48	899	455	74	0.4
TOTAL	7,489	2,990	2,146	5,136		4,499	2,353		

TABLE III
NET FOREIGN EXCHANGE SAVING OF RAYON INDUSTRY (STAPLE FIBRE ONLY)

Year	GIS (Rs lakhs)	Imported raw materials (Rs lakhs)	Other foreign exchange costs (secondary imports) (Rs lakhs)	Total foreign exchange costs (2+3) (Rs lakhs)	Primary import dependence of output (1/2)%	Net import substitution (1-2) (Rs lakhs)	Net foreign exchange saving in the industry (1-4) (Rs lakhs)	Total import dependence of the industry (4/1)%	Net foreign exchange producti- vity (7/4)%
	1	2	3	4	5	6	7	8	9
1957-58	213	76	48	124	36	137	89	58	0.7
1958-59	364	263	74	337	72	101	27	93	0.1
1959-60	530	242	78	320	46	288	210	60	0.7
1960-61	567	268	78	346	47	299	221	61	0.6
1961-62	676	293	92	385	43	383	291	57	0.8
1962-63	832	257	99	356	31	575	476	42	1.3
1963-64	840	241	99	340	29	599	500	40	1.5
TOTAL	4,022	1,640	568	2,208		2,382	1,814		

exchange costs consisting of the depreciation, premium on foreign exchange use and commissions, etc. Column 4 gives the total of foreign exchange used (sum of columns 2 and 3). Column 5 gives the primary import dependence of the output produced. Column 6 gives "net" import substitution, i.e., the difference between the gross foreign exchange saving and the expenditure on imported raw materials for the same. The "net" foreign exchange saved is presented in column 7. Column 8 indicates the level of foreign exchange dependence of rayon industry through the period while column 9 gives the net foreign exchange productivity of the industry.

PRIMARY IMPORT DEPENDENCE OF RAYON INDUSTRY

Over the period, the GIS in the yarn and fibre sector of the industry has gone up by 320 per cent and 400 per cent respectively. During the same period, there is also an increase in the imported plant and machinery but of relatively smaller magnitude, indicating better utilisation of capacity and also lower incremental capital-output ratio. The increase in the raw material imports by the yarn manufacturers has been greater than that in the GIS so that the primary import dependence of yarn production has gone up. As can be seen from column 5, the import dependence of production has gone up from around 30 per cent in the initial four years to around 50 per cent. During the period, there has been no effort to produce domestically the raw materials and hence the imports have increased. Yet the substantial rise calls for an explanation. This rise is attributed to the following factors:

- (a) There has been an overall increase in the prices of raw materials like sulphur and pulp. Since the data are in current prices, the rising prices introduce an upward bias in the picture.
- (b) Import dependence is likely to have genuinely increased as a result of the new small-sized units, which came into existence since 1961. It is suspected that the smaller plants cannot avail themselves of certain economies in raw material utilisation, enjoyed by the large ones. To the extent this is true, the overall raw material requirements of the industry are likely to have gone up.
- (c) With a steady improvement in the quality of the product produced over the period, better grade material, costing more, has also been imported. It is also felt that because of the uncertain import policy, the units may have resorted to overstocking of the imported material. In fact, some of the officials interviewed expressed the feeling that there is a

substantial overstocking of imported pulp and spare parts in the industry. A recent incident may go to support this contention. The import policy for the period, April 1965-March 1966, did not allow any imports of pulp for the industry. It was maintained by the industry that production would come to a halt within a couple of months once the existing stocks were used. However, production continued almost unaffected at least for eight months.

While these various factors need to be kept in mind in analysing the change in the import dependence, we would be warranted in inferring that the industry has been totally unsuccessful in effecting any import substitution in its production during the period under study.

In the fibre production, on the other hand, a remarkable decline in the primary import dependence is observed. The import dependence of the industry, which was around 40 per cent in the first five years, declined to 30 per cent in the last two years. This has been mainly because of the setting up of indigenous pulp production. It is said to be the first time that a rayon grade pulp is produced from bamboo on a commercial scale. This indigenous production of pulp has resulted in reducing the raw material imports for fibre production. It seems that as more and more of such pulp becomes indigenously available, the primary import dependence of fibre production would be substantially reduced. Yet, at the end of the period covered here, the level of primary import dependence was not insubstantial.

“OTHER” FOREIGN EXCHANGE COSTS IN RAYON INDUSTRY

The “other” foreign exchange costs, on the other hand, declined in the yarn as well as fibre production. This may be traced to better utilisation of plant, which reduced the incidence of depreciation and premium charges per unit of output produced. These costs would increase as some of the units having foreign equity participation start distributing dividends. The foreign holdings amount to about Rs 160 lakhs and, therefore, substantial burden of dividend remittances could be anticipated.

NET FOREIGN EXCHANGE SAVED BY RAYON INDUSTRY

The decline in “other” foreign exchange costs partially offset the effect of rising import dependence of production on the “total” foreign exchange dependence of the industry. However, the overall foreign exchange contribution through such poor foreign exchange productivity is unlikely to have been significant. Thus the performance of the industry has been quite disappointing at least

as far as foreign exchange saving through import substitution is concerned.

This is all the more so in view of the nature of the product and the initial considerations which prompted the development of the industry. It was recognised and clearly stated by the Planning Commission that the rayon industry could be considered as a producer of luxury or semi-luxury products and its expansion in proportion to the demand for its products is unjustified and should not be allowed. Furthermore, there are no adequate raw material supplies within the country, making the industry heavily dependent on imports. As against this, it was pointed out that imports of rayon for indigenous weaving industry and also of fabrics for direct consumption were substantial in the pre-Plan period. Imports of yarn and piece-goods in the three years preceding the First Plan averaged to more than Rs 15 crores. It was, therefore, thought that domestic production would reduce these imports and lead to foreign exchange savings. Further, it was hoped that the fibre produced indigenously would be able to substitute the imports of long-staple cotton in the textile industry, which would thus be able to secure sizable import saving. However, it was recognised that such development would effectively save foreign exchange only to the extent the industry became free of the imports of raw materials. For this reason, it was stated that the programme of development of the industry should be coordinated with (i) the development of chemicals like sulphuric acid and rayon grade caustic soda; and (ii) the manufacture of rayon pulp in the country. "In the absence of coordinated development in these two fields, the rayon industry would have to continue to depend on foreign raw materials on account of which the benefits, if any, would be meagre and doubtful." Unfortunately, this clear and logical approach was not pressed into practice.

In pursuance of the aforementioned observation, the First Plan envisaged indigenous production of rayon pulp by the beginning of the Second Plan and it was proposed to provide for capacity to produce 11,500 tonnes of pulp. Later, it was found that the proposed pulp project was not economically feasible and, therefore, nothing was achieved by the beginning of the Second Plan. In the Second Plan, provision was again made for setting up a pulp plant with 30,000 tonnes capacity and full production was expected by the end of the Second Plan period. Still, no indigenous pulp production took place. The Third Plan provided for the capacity and production of one lakh tonnes and 90,000 tonnes respectively by the end of the Third Plan period. The actual performance has, however, been far from satisfactory inasmuch as only at the beginning of 1963, some production started. By March 1964, the output

produced was barely 7,500 tonnes against the overall requirement of around 75,000 tonnes! By the end of the Third Plan, the annual production of pulp amounted to 15,000 tonnes. Further, in view of the lack of progress by other licencees, it is doubtful if production would exceed 20,000 tonnes in the near future. Moreover, it is not yet certain whether the bamboo pulp, presently made available, could be used for yarn. It is felt by some of the yarn producers that it could be used only for staple fibre production and is unfit for yarn production. Domestic production of the other inputs, viz., sulphuric acid, caustic soda, additives and dyes and some of the spares has started. However, their impact on the primary import dependence is unlikely to be very marked for two reasons: firstly, the import dependence of some of these products themselves is not insubstantial and, secondly, they account for a relatively small portion of the inputs required in the rayon industry. All in all, the progress of import substitution in the production could be said to be negligible for the period covered. This stands out in sharp contrast with the earlier official statements which made such progress a pre-condition for the development of the industry.

Another way through which the industry was expected to make substantial foreign exchange saving was the replacement of long-staple imported cotton used in the textile industry. Initially, it was maintained that staple fibre was a suitable substitute for long-staple cotton and the textile industry should switch over to the staple fibre. However, no firm understanding had been reached with the textile producers. It was argued on their behalf that the use of staple fibre lessened the strength and the durability of the fabric. It was further feared that this might affect some of the textile exports. Presently, it seems that the blending and mixing procedures permit only up to 15 per cent of long-staple cotton to be substituted by rayons. On the whole, the prospects in this direction do not seem to be holding any promising developments. (However, since last year or so rayon is being successfully utilised in the place of imported wool and substantial progress is said to be under way in this direction.)

As a result of all this, the net foreign exchange saving by the industry has been negligible. No doubt, the imports of yarn and fibre are almost entirely eliminated today—except some small quantities of special types. This could have resulted in an effective saving of foreign exchange only if the industry had been able to “deepen” the process of substitution in its production. As the things have developed, in retrospect at least the allocation of scarce resources for the expansion of the industry of this nature must seem to be of questionable wisdom.

COMPARISON BETWEEN ALUMINIUM AND RAYON

An interesting parallel may be drawn between the two industries studied here. The aluminium industry is by all means a priority industry. It has a natural advantage insofar as the main raw material of the industry is abundantly available in the economy. Its progress in reducing the foreign exchange dependence has been impressive, which has consequently raised the foreign exchange productivity. Its production could be said to be relatively efficient inasmuch as the difference in its selling price and the c.i.f. price is only around 35 per cent. Further, vigorous and successful efforts to substitute other imported metals are constantly progressing. On the other hand, the rayon industry cannot claim to be a priority industry. At least so far, its raw material availability in the economy does not seem to be favourable. Its record of reduction in the foreign exchange dependence as well as progress in the foreign exchange productivity have been far from encouraging. The difference in its selling price and its c.i.f. price is around 200 per cent and seems to be on ascendency. Its progress in substituting the other imports, viz., long-staple cotton, has been poor.

One could almost remark that the two industries—aluminium and rayon—respectively represent the use and the abuse of the import substitution policy. The development of the industries like aluminium with its record of foreign exchange saving indicates how, when the scarce foreign exchange is used judiciously, it caters to the urgent needs of the economy and also, in the process, contributes to creating a more viable production structure in the country. The development of the rayon industry, on the other hand, points to the dangers inherent in the policy of import substitution. It allows the use of the scarce resources to develop relatively a low priority, uneconomic industry which satisfies and expands consumption of a questionable character. Apart from the cost involved in the sub-optimal utilisation of resources it leads to, it results in inessential imports and produces an undesirable rigidity in the import structure.

This also touches upon the role of protection in an economy developing with a policy of import substitution. It is interesting to note that unlike aluminium, the rayon industry does not enjoy any *de jure* "protection". Yet, due to the restrictive import policy it has enjoyed effective or *de facto* protection. This explains the rapid growth of the industry in spite of its being one of the high cost industries. As a matter of fact, when in 1963 there was a move on the part of the Government for initiating Tariff Enquiry to fix the fair prices, the industry resented it and maintained that "the enquiry has been fastened on the industry at the very early stages of

its development, i.e., when the industry, compared with others, may be stated to be still in its adolescence, by any standard." (Subsequently, the enquiry was dropped!) Before the policy of import substitution and import restrictions had been initiated, industries used to plead and urge the Government for such an enquiry and protection. Today we find the industries turning down and resenting an offer of such a helping hand through Tariff Enquiry and protection! However, it should be noted that, the more the policy of import substitution results in producing this kind of industrialisation, the more it is likely to frustrate the goal of rapid and self-reliant economic development.

LABOUR-INTENSIVE EXPORTS IN SPECIALTY MARKETS

By Richard N. Farmer

MUCH attention is focussed on major world export markets, because these offer such large foreign exchange earning potential to countries and firms involved. However, there often are considerable export possibilities in small, highly specialised industrial markets, and this paper considers one odd situation in the United States. Model railroading is hardly big business, but Japan has been able to export to the US from \$10 million to \$15 million per year in this specialised field during the past decade.

Moreover, the types of exports made were highly labour-intensive, which can be of interest to developing countries. As Japanese labour costs rise, this market is available for anyone willing to look at it closely. It also may suggest further possibilities in similar markets in the advanced countries. Even a cursory glance at American import statistics suggests that literally tens of thousands of minor items, often potentially labour-intensive, are imported. Knowing how one minor market was successfully entered may suggest strategies for others. As it turned out, the model railroad market was not easy to penetrate, but it was done very successfully by Japanese firms in cooperation with American marketers. This paper is intended to suggest the key factors in this export success.

MODEL RAILROAD MARKET IN THE US

It is estimated that there are about 100,000 serious adult model railroad hobbyists in the US. Perhaps as many are active in all developed European countries combined. These hobbyists typically build complete model railroads, with electrically powered model engines, to operate for their own enjoyment. They tend to be upper-middle class, highly sophisticated buyers in this field, with incomes high enough to obtain the desired equipment.

What they typically want are models which are highly accurate reproductions of existing and historic railway equipment. Of particular interest to importers has been the locomotive market, because these models not only are the most important pieces of equipment, but they also are the most detailed, complicated and interesting to many hobbyists. Models of steam, electric and diesel locomotives are marketed in the US at retail prices ranging

from \$5.95 to several hundred dollars. The inexpensive models may sell tens of thousands; the more expensive a few thousand or hundred of each prototype.

Now, American hobbyists prefer American type locomotives and equipment, while hobbyists in other countries prefer their own countries' equipment. Since full-sized railways around the world are quite different, the result is to limit sharply the production runs of any given piece of equipment. This, plus the large amount of detail work which necessarily must go into an accurate model, means labour-intensive manufacturing techniques.

The standard scale for American hobbyists is HO (1 : 87 proportion). Models of this type, particularly steam locomotive models, are best crafted in brass, a metal not suited to mass production. The standard imported model is a steam prototype, produced in brass in a few thousand copies, and sold at retail for perhaps \$49.95 or \$59.95. Dealers' margins tend to be about 40 per cent.

HO gauge started in England in the 1920's and was imported into the US in the early 1930's. Historically, Americans made their own equipment, but after World War-II, it became increasingly difficult to manufacture good replicas of prototypes with very high American labour costs. In the early 1950's, Japanese firms began their import penetration. As early as the 1930's, some Japanese material had been imported, but these items were typically cheap, shoddy trash, unsuited for serious model work. By 1950, the Japanese reputation in the US was one of low-grade models, unsuited for anything but the toy market.

By 1965, however, the picture had completely reversed. The Japanese products were the high-quality, premium-priced items, while the American competition was the shoddy material. In this curious market, the American goods are low-cost, low-quality material, while the Japanese items are quality.¹

It should be emphasised that this market is *not* a toy market. Japanese models sell for very high prices, and values at retail of over \$80 per pound are not uncommon. These models are more

¹American firms have necessarily opted for capital-intensive production, given American labour costs. The results with model locomotives is to use pressure injection die casting techniques, with most minor detail cast on. The method is low cost, but the quality suffers considerably in terms of perfect reproduction. Japanese models have most minor details (and there are hundreds) put in place as individual pieces by hand. There is no other way to do the job properly.

akin to fine watches than toys, and few children have opportunities to play with them. Yet they sell well in the USA. Tariff increases from 20 to 30 per cent *ad valorem* in 1963 had no noticeable effect on these imports, because hobbyists prefer to pay premium prices for what they want, rather than lower prices for models which they see as being inferior quality.

This strong market position gained by Japanese firms was not achieved easily. Even now, the bulk of purchases are for American equipment, because for lower cost toy use as well as for items which can be mass produced in volume (e.g., track), the American firms have succeeded in holding their own. But the manner in which Japanese firms succeeded in a highly specialised, narrow market is worth consideration.

THE JAPANESE BOOM, 1950-68

A few small American firms were importing Japanese equipment before 1950. This material was made crudely of brass, had very inferior electric motors, and was sold very cheaply. But a few Americans noted the potential, both as visitors or servicemen in Japan and in the US. A major problem was prototypes. Much Japanese equipment was not American styled, which did not interest most American buyers.

A few importers arranged for small production runs for Japanese firms of models built to American designs. These same importers also tried to get better quality built into the product, arguing that hobbyists in the US would be willing to pay a premium price for good equipment. The Japanese, long accustomed to selling low-price material, were dubious. But the American marketers insisted, and eventually prevailed.

American marketers also did not hesitate to use American parts if the Japanese products were not up to quality standards. Motors and special small castings were (and are) often produced in the US for these models.

From the production side, quality control was the key problem from the beginning. The Japanese Government has been stressing quality for many years, so some official support was forthcoming, but the key pressure here was from the market. Low-quality material just did not sell. Japanese firms proved very adept at constantly upgrading their products, which, given the thousands of prototypes to be copied, tended to change with each small production run. In a labour-intensive industry, this meant careful and constant retraining of workers. These models are typically made of hundreds of small pieces, each carefully soldered, bolted

or riveted together. Small slips, sloppy workmanship or minor errors in measurement, and the production is trash, unfit for sale. This production involves a well-disciplined work force.

As this market evolved, a successful pattern of division of labour developed, which continues as follows:

- (1) The US marketer told his Japanese production partner what to produce, how much to produce, and in what quality. The highly specialised nature of the US market meant that the Japanese firm could not possibly anticipate what to produce. Moreover, there are literally thousands of prototypes, current and historical, to choose from. A good choice meant a quick sell-out of the production run and good profits; a poor choice meant slow sales, discount in the US and potential losses for the American marketer, with correspondingly low re-orders.
- (2) The American buyer set up marketing channels. For a highly specialised product of this type, it was critical to reach a widely scattered group of highly discriminating buyers. The Americans did this successfully by using advertisements in the specialty trade press; by developing a mail order business; and by establishing marketing outlets in hobby shops throughout the country.

All of this was an extremely complicated business. As one example of the kinds of problems marketers faced, some types of American locomotives are largely used in the West. A model, absolutely faithful to prototype of a Western locomotive, would sell poorly in the East and South—and *vice versa*. The marketer could not simply import models and send 10 to each of 200 shops. He would find his Western shops sold out, while his Eastern retailers would complain about slow sales.

Absolute fidelity to prototype was, of course, the key to success, when combined with good operating characteristics. Thus the American marketer had to live with the complex history of American railroading in regard to locomotive design. So did the Japanese manufacturer, who never even saw the items he was so faithfully reproducing in miniature.

- (3) The Japanese manufacturer concentrated on production, labour training and quality control. This latter point was critical, as noted above. The market was too discriminating to allow for less. Yet the necessarily labour-intensive nature of production meant that labour had to be low cost.

About the only time the Japanese manufacturer got into the buyer's consciousness was when the "Made in Japan" label was attached to the locomotive. However, as certain makes of locomotives gained reputation for quality, the marketers in the US began to use the Japanese manufacturer's name as a synonym for quality. Names such as Fujiyama are now marks of quality among the knowledgeable in the field.

This division of labour, developed gradually over a decade, has proved successful in what has proved to be a relatively slow-growing, yet lucrative market. Similar developments, on a much smaller scale, have taken place in Australia and several European countries. However, most countries tend to discriminate against both Japan and such inessential imports, so other markets will remain small. Since each country wants models of its own locomotives, these other markets will tend to remain smaller indefinitely.

The Germans, masters of the toy trade, missed this market completely. The major reason was the manufacturers' unwillingness to develop American prototype models for sale in that country. They also adopted, long ago, electrical and track standards which preclude the operation of their equipment on American miniature railways, thus foreclosing the market in advance. The English and French also never have made much penetration into the American market for the same reasons. Only the Japanese, who were willing to go along with what must have seemed to be weird requests of their American marketing agents, were successful in this demanding field.²

PRESENT TRENDS

In this highly specialised market, nothing stays constant for long, and both marketers and manufacturers have had to make continuous adjustments to survive. Manufacturers have made continuous improvements in quality over the years, to the point where their products perhaps represent a very lively minor art form. One marketing offshoot of this development is that many buyers just collect locomotives from Japan, rather than operate them.

²But a few Italian firms, also assisted by perceptive American marketing agents, have succeeded in penetrating the lower end of the market with the capital-intensive techniques such as pressure injection plastic casting. All models are American prototypes. The firms are aiming at the lower cost toy-model market, not the sophisticated hobbyist market now dominated by Japanese production. Full coverage of this success story is properly the subject of another paper.

Marketers have problems of presenting something new all the time, while still keeping old favourites in stock. A problem here is limited production runs, because the unique characteristics of each model preclude casual re-runs. If the marketer miscalculates his demand, he cannot easily get the item back in stock shortly. And as the more popular models are sold in a limited market, he must constantly search for new ones which will be equally attractive.

But the major problem facing this industry is cost inflation in Japan. In a rapidly expanding industrial economy, labour is no longer cheap, and prices tend to rise steadily as wages rise in Japan. Some of the skills involved in this industry, such as soldering, are the same as those used in major industries such as electronics, and the small firms complain that as soon as young girls are properly trained, they are lured away at high wages by larger firms. And the previously large pools of agrarian labour to be readily tapped by small firms are by now largely exhausted.

As a result, prices and costs keep going up in Japan, and they have about doubled in ten years at retail in the US. To date, this has not noticeably hurt sales, but it seems clear that price increases have a limit. At that future point, someone else will take the market.

American marketers have actively searched for alternatives, without much success to date. The problem is to find a country which has cheap labour. But more is required. The manufacturing firm has to have real discipline about quality control. It must also have firms whose managers are willing to take product design orders without question, and without any effort to cut corners on this point. Models have failed to sell in the US because of this factor alone. A prototype may have had 80-inch driving wheels. The manufacturer, already producing other models, has in stock some good scale 72-inch drivers, so he uses these. The result? No sale to sophisticated buyers. Outsiders seem amazed that a difference of about 1.5 millimetres in wheel size on a one-eighty-seventh full-size model matters, but he simply does not understand the problem. The buyers know and care, and when one pays over \$50 per pound for his merchandise, he expects the best.

CONCLUSION

The typical reaction to this sort of export question is, so what? Bigger and better markets are available. But ten \$15 million markets of this sort begin to add up to something important, and countries which have the resources and capability to exploit them can do so to their profit. The author knows of many of these minor markets where exporters (typically from Japan, but often

from such places as Yugoslavia or Portugal) have succeeded in gaining a good position.

The lesson which keeps reappearing in many of these situations is the same. If the country exporting is relatively a newcomer to manufacturing, it typically does not have the marketing know-how to successfully attack such situations. Thus the firm producing the items has to rely very heavily on marketing representatives in the importing country. The highly sophisticated economies such as the US utilise an enormous amount of odds and ends in the economy, and many of these minor markets are available for the taking—if the marketing job is done correctly.

This model railroad case also suggests that it takes a long time for various articles to get the system operating properly. More than fifteen years have passed since the first high quality imports began entering the US, and the market and manufacturers are still evolving. Such developments take time, for the complexities of even a small market must be mastered by all. Quick results rarely occur in these markets.

So there it is. Traditional exporting involved standard products marketed through routine international markets, but this odd example hardly fits the pattern. Yet, while relatively unimportant in itself, the pattern may be significant. It also may explain why many of the newly industrialising nations have considerable troubles in exporting in many sectors. Unique products involve new forms of market-production cooperation between parties in several countries, with each party well aware of the role he plays. Perhaps consideration of this sort of export market will suggest new possibilities.

TWO YEARS OF DEVALUATION*

By S. Hajra

SINCE the middle of the Second Five-Year Plan India has been trying to improve its balance of payments position through severe restrictions on imports (particularly on non-essential imports), on the one hand, and various promotional measures to diversify and expand exports, on the other. For the expansion and diversification of exports, the promotional measures adopted were: import entitlement, tax credit certificates, priority allocation of iron and steel at concessional rates, rail freight concessions, etc. During 1964 and 1965, the value of the export products receiving assistance was Rs 171.0 crores and Rs 166.5 crores respectively, and as a proportion of total exports they were 21.6 and 20.0 per cent respectively. Towards the end of the Third Five-Year Plan exports showed signs of stagnation. Between 1963-64 and 1964-65, value of exports increased by 2.7 per cent only and the balance of payments deficit increased from Rs 429.6 crores to Rs 448.8 crores, i.e., by 4.5 per cent.

For further expansion of exports it was felt that export prices should be reduced and devaluation of the rupee was considered essential for this. The Government of India, therefore, decided to lower the par value of rupee (for the second time since independence) and on June 6, 1966 the rupee was devalued to the extent of 36.5 per cent in terms of gold prices and 57.5 per cent in terms of hard currencies. Present devaluation was considered to be an effective substitute for the previous export promotion measures as well.

EXPORTS AND EXPORT PRICES

Here we consider 24 commodities, which formed 40 per cent of total exports in India during 1959-65, and examine whether the volume of exports and export prices of these commodities bore any systematic relationship. To examine the relationship between exports and export prices we consider: (a) the maximum exports and the corresponding export prices during 1959-65, (b) the minimum exports and the corresponding export prices during 1959-65, as well as, (c) the maximum and minimum export prices during 1959-65 and examine whether the following relationships

*The views expressed are personal.

are satisfied, e.g., (i) exports were maximum at minimum prices, and (ii) exports were minimum at maximum prices. From a comparison of the maximum exports and the corresponding export prices with the minimum export prices during 1959-65 (Table I on p. 321) it is seen that for 10 commodities, viz., biscuits, mill-made shirtings and long cloth, bolts and nuts, umbrellas, toilet soap, black tea, sacking bags, snuff, ceiling fans and sewing machines, the first relationship did hold good and for the other 14 commodities export prices corresponding to maximum exports were higher than the minimum export prices, i.e., for these 14 commodities the first relationship did not hold true. For three commodities, viz., mill-made drills and jeans, webbing of jute and razor blades, the export prices corresponding to maximum exports were equal to maximum prices during 1959-65.

From a comparison of the minimum exports and the corresponding prices with the maximum export prices it is seen that for 11 commodities, viz., groundnut oil (refined), mill-made *chaddars* and sheetings, mill-made shirtings and long cloth, umbrellas, toilet soap, cashew kernel, hessian cloth, sacking cloth, sacking bags and ceiling fans, the second relationship did hold true and for the rest of the commodities the maximum export prices during 1959-65 were higher than the export prices corresponding to minimum exports. The commodities which satisfied both the relationships are: mill-made shirtings and long cloth, bolts and nuts, umbrellas, toilet soap, black tea, sacking bags and ceiling fans. On the whole, the evidence is not sufficient to justify that during 1959-65 price mechanism played its due role in export trade.

EXPORT PRICES AND MANUFACTURING PRICES

Unit manufacturing prices (in 1960 and 1963) of these 24 commodities are also given in Table I. A comparison of 1960 and 1963 manufacturing prices indicates that for almost all the commodities 1963 prices are higher than the 1960 prices, which somehow suggests that costs of production of these items in 1963 increased from the 1960 level. A comparison of the manufacturing prices with the minimum export prices (Table I) suggests that for all the commodities manufacturing prices are higher than the minimum export prices and a comparison of the manufacturing prices with the maximum export prices (Table I) suggests that for several commodities, viz., cotton thread (sewing or darning), mill-made *chaddars* and sheetings, mill-made drills and jeans, umbrellas, toilet soap and razor blades, the manufacturing prices (in 1963*)

*1963 price is to be considered latest, because the latest available volumes of ASI from which these prices have been calculated relate to 1963.

TABLE I

Commodity	Unit	Maximum export (1959-65)		Minimum export (1959-65)		Maximum export price during 1959-65 (Rs)		Minimum export price during 1959-65 (Rs)		Manufacturing price (Rs)	
		Qty.	Price (Rs)	Qty.	Price (Rs)					1960	1963
1. Biscuits*	Kg.	988.5	2.52	69.7	3.50	3.55	2.52	2.99	3.27		
2. Groundnut oil (refined)**	"	971.1	1.38	0.4	3.01	3.01	1.35	1.68	1.72		
3. Cotton thread (sewing or darning)**	"	419.6	10.12	237.9	10.65	12.05	8.83	9.41	14.66		
4. Mill-made chaddars & sheetings**	M	2,187.3	0.75	1,036.2	0.85	0.85	0.62	0.81	0.88		
5. Mill-made drills & jeans**	"	278.8	1.03	33.1	0.84	1.03	0.84	0.97	1.04		
6. Mill-made shirtings & long cloth**	"	598.0	0.67	52.2	0.91	0.91	0.67	0.75	0.80		
7. Bolts & nuts of iron or steel	T	806	1,162.32	8	2,742.40	2,742.40	1,162.32	1,475.23	1,587.15		
8. Umbrellas*	No.	971.0	2.42	9.1	3.56	3.56	2.42	6.34	5.73		
9. Cashew kernel**	"	556.1	5.22	360.3	5.78	5.78	3.98	4.18	3.92		
10. Black tea**	"	2,183.5	5.87	1,649.6	5.93	6.21	5.87	4.68	—		
11. Toilet soap*	Kg.	882.4	2.95	290.8	3.31	3.31	2.95	3.83	4.10		
12. Hessian cloth*	T	497.3	2,095.56	360.4	2,133.54	2,133.54	1,552.76	1,617.96	1,757.50		
13. Sacking cloth*	"	15.7	1,504.99	2.2	2,386.52	2,386.52	1,335.04	1,289.90	1,220.75		
14. Hessian bags*	"	107.6	1,888.33	43.7	1,541.40	2,167.84	1,541.40	1,646.41	1,773.90		
15. Sacking bags*	"	266.8	1,002.92	177.0	1,626.49	1,629.40	1,002.92	1,310.43	1,256.91		
16. Jute webbing**	Kg.	39.4	2.42	29.8	0.61	2.42	0.61	2.04	1.71		
17. Jute rope & twine**	"	77.5	1.53	26.7	1.52	1.59	0.76	1.12	1.05		
18. Snuff*	"	17.0	9.44	12.4	11.15	11.42	9.44	9.56	10.98		
19. Razor blades*	HND	2,396.6	1.26	179.3	1.14	1.26	0.75	1.52	2.63		
20. Std. size typewriters	No.	974	414.29	9	585.56	870.94	277.36	639.86	546.74		
21. Ceiling fans*	"	102.5	70.08	30.9	104.95	104.95	70.08	121.17	—		
22. Pedestal fans	"	1,857	106.39	517	90.27	120.54	90.27	110.87	—		
23. Table fans*	"	35.2	71.24	7.4	73.61	93.27	57.20	87.71	—		
24. Sewing machines*	"	59.4	73.84	22.1	99.11	105.55	73.84	140.97 ^a	171.34 ^a		

*Quantity expressed in thousands.

**Quantity expressed in lakhs.

^aAverage of hand-operated, foot-operated and power sewing machine prices taken.

are higher than the maximum export prices. This evidence, therefore, suggests that in the past the scope for reduction in export prices remained quite limited.

PRICE ELASTICITY OF EXPORTS

Price elasticity of exports is defined here as the proportionate change in exports (volume) with respect to proportionate change in export prices. If the relationship between exports (E) and export prices (P) is expressed as: $E = a.p^b$, then b is the price elasticity of exports. The value of b may be estimated from the statistical model $\log E = \log a + b \log p$. From the volume of exports and export prices of different commodities during 1959-65, the elasticities are estimated and given in Table II on next page. (The value of r^2 for the above fit for 30 commodities and the estimated value of b are given in Table II.) For an inverse relationship between the volume of exports and export prices, the sign of b should be negative. In seven of these 30 commodities, viz., raw jute, jute hessian cloth, jute hessian bags, mill-made drills and jeans, safety razor blades, pedestal fans and table fans, however, the sign of the estimated value of b turned out to be positive to mean the absence of inverse relationship between the quantity of exports and prices of exports (this conclusion, however, cannot be made strongly because the statistical fit was relatively good for only two of them, viz., mill-made drills and jeans only). For the other 23 commodities, the sign of b turned out to be negative as expected for an inverse relationship between the volume of exports and export prices. In 13 of these 23 commodities, the statistical fit was moderately good, viz., biscuits, black pepper, groundnut oilcake, snuff, sheep and lamb wool, raw cotton, cotton waste, iron ore, cotton thread (sewing or darning), jute sacking cloth, webbing of jute, mill-made shirtings and long cloth, and ceiling fans. The estimated value of elasticity for all these 13 commodities turned out to be greater than unity (except black pepper). The commodities which showed systematic relationship between the volume of exports and export prices are: black tea, manganese ore, toilet soap, different manufactures of jute (except jute sacking cloth) and typewriters. The above evidence thus suggests that for 13 commodities export proved to be sufficiently price elastic. As a result, it could be expected that reduction in prices through devaluation should produce beneficial effect on the export of at least these 13 commodities. For the other 10 commodities estimated b turned out to be negative, but since the statistical fit for them is not good, no definite expectation can be formed as to what might happen on the exports of these commodities after devaluation.

TABLE II
PRICE ELASTICITY OF EXPORTS*

<i>Commodity</i>	<i>No. of observations</i>	<i>b</i>	<i>r²</i>
1. Biscuits	7	-4.3398	0.3939
2. Cashew kernel	7	-0.1538	0.0195
3. Black tea	7	-1.8788	0.1678
4. Black pepper	6	-0.9559	0.4206
5. Groundnut oilcake	6	-2.0152	0.8067
6. Tobacco	6	-0.7231	0.3222
7. Snuff	7	-1.0446	0.7475
8. Sheep & lamb wool	6	-1.6321	0.5685
9. Raw cotton	6	-1.7635	0.4908
10. Cotton waste	6	-1.8692	0.5732
11. Raw jute	5	+3.6788	0.3591
12. Iron ore	6	-3.0916	0.9634
13. Manganese ore (grade I)	6	-0.8452	0.0701
14. Manganese ore (grade II)	6	-0.0125	0.00002
15. Toilet soap	7	-8.6214	0.0692
16. Cotton thread (sewing, etc).	7	-1.6853	0.4330
17. Jute hessian cloth	6	+0.1483	0.0208
18. Jute sacking cloth	7	-2.5196	0.7521
19. Webbing of jute	7	-1.2281	0.4959
20. Cordage, cable, rope, twine of jute	6	-1.3719	0.2995
21. Jute hessian bags	7	+1.6468	0.2779
22. Jute sacking bags	7	-0.4179	0.2103
23. Mill-made <i>chaddars</i>	6	-0.6437	0.0885
24. Mill-made drills and jeans	5	+2.4000	0.6940
25. Mill-made shirtings and long cloth	6	-3.8748	0.4590
26. Safety razor blades	7	+0.9959	0.0534
27. Typewriters (std. size)	7	-0.8952	0.1327
28. Ceiling fans	7	-2.1348	0.6470
29. Pedestal fans	7	+1.9610	0.2483
30. Table fans	6	+2.0287	0.2431

*The function fitted, $E = ap^b$.

POST-DEVALUATION MEASURES

Measures adopted to improve the export trade in India after devaluation may be classified into two broad groups: firstly, those measures which were designed to boost production of export commodities and exports, and secondly, those measures which were designed to maintain the international price through import-export duties and also those measures which were designed to hold import prices within reasonable limits.

For the production of export commodities it was considered that the shortage of raw materials should in no way inhibit production and for this purpose the imports of raw jute, cashew kernel, etc., were placed under "open general licence", so that the exporting units and manufacturers could import these raw materials freely and easily. Further, in order that exporting units and industries could recover the import content of the exported products, "registered exporters" were put on par with established importers and actual users.

In several industries, e.g., engineering, chemicals, processed food and garments, "green form" allotment of raw materials (by the Director of Export Promotion) for the committed export or orders already executed, was planned to ensure prompt supply of indigenous raw materials.

To increase the production of tea and coffee the requirement of pesticides, fertilisers, etc., has been given highest priority. To provide cheap credit to the tea planters for replantation and new plantation, a Tea Finance Guarantee Corporation was also set up.

To facilitate larger export of mineral ores, etc., better transport and mechanised handling of loads at ports have been given top priority.

In order to meet foreign competition in items like engineering goods, iron and steel scrap, and chemicals, cash assistance has been given to exporters.

In order to mop up a part of the windfall gains accruing to exporters, export duties were imposed with effect from June 6, 1966 on 11 commodities, viz., (1) jute manufactures, (2) tea, (3) black pepper, (4) raw wool, (5) coffee, (6) de-oiled groundnut oilcake, (7) de-oiled groundnut meal, (8) tobacco (unmanufactured), (9) mica (all sorts), (10) hides, skins and leather, and (11) coir and coir manufactures; and from August 2, 1966, export duty was imposed on five commodities, namely, (1) iron ore, (2) manganese ore, (3) sillimanite, (4) steatite, and (5) kernite.

EXPORT PERFORMANCE, 1965-66 TO 1967-68

Through price mechanism devaluation may be expected to improve export trade only if there is much demand abroad and the supply at home is sufficient to meet it, i.e., demand abroad and supply at home are price elastic. If demand for exports in the external market is price elastic, then by reducing price, devaluation will stimulate exports; and if the supply is price elastic, then by increasing export prices in domestic currency, it will increase supply. For devaluation to produce the desired results, therefore, the demand for and supply of export commodities must be price elastic.

The exports of 31 commodities (in quantity and value) during June-May (1966-67) (which completed one year of devaluation) and the same time-period in the earlier year are given in Table III(a) on p. 326. From the Table it can be seen that exports of 10 of these 31 commodities, which were price elastic, increased during 1966-67. The increase in the volume of exports of these commodities during 1966-67* over 1965-66** is: biscuits (3.3 per cent), black pepper (ungarbled) (39.1 per cent), snuff (34.3 per cent), raw cotton (13.9 per cent), cotton waste (3.6 per cent), iron ore (3.7 per cent), cotton thread (sewing or darning) (49.8 per cent), narrow fabrics of jute (20.4 per cent) and ceiling fans (26.3 per cent). The commodities which showed the evidence of price elasticity but whose exports did not increase after devaluation are: groundnut oilcake, sheep and lamb wool, and sacking cloth. The other commodities for which the evidence of price elasticity was not significant but whose exports increased are: raw jute and sewing machines (complete without stand).

The commodities for which export earnings increased are: black pepper (ungarbled) (35.0 per cent), snuff (3.6 per cent), raw jute (56.3 per cent), cotton thread (37.1 per cent), narrow fabrics of jute (14.5 per cent), jute fabrics woven carpet backing cloth (23.0 per cent), sewing machines (complete without stand) (238.0 per cent), and ceiling fans (14.4 per cent).

For the commodities, viz., biscuits, raw cotton, cotton waste and iron ore, there was increase in trade in volume, but export earnings declined, because prices declined faster. The dollar prices of exports declined in the case of all the commodities except cashew kernel, tobacco, typewriters, sewing machines (complete with stand) and table fans and, as a result, total export earnings declined much more than the decline in real exports. The decline

*1966-67 refers to the period, June 1966 to May 1967.

**1965-66 refers to the period, June 1965 to May 1966.

TABLE III(a)

Commodity	Unit	1965-66*		1966-67*		1966-67 over 1965-66 (Percentage)	
		Quantity	Value (ml. \$)	Quantity	Value (ml. \$)	Quantity	Value
1. Biscuits	(000 kg.)	96.02	0.520	99.15	0.467	+ 3.3	- 12.2
2. Cashew kernel (whole)	(00,000 kg.)	359.75	44.708	337.16	44.395	- 6.3	- 0.7
3. Black tea (leaf in bulk)	(")	1,727.55	214.527	1,721.53	194.678	- 0.3	- 9.3
4. Black pepper (garbled)	(")	207.95	21.663	191.05	14.441	- 8.1	- 33.5
5. Black pepper (ungarbled)	(")	7.16	0.594	9.96	0.802	+ 39.1	+ 35.0
6. Groundnut oilcake solvent extracted	(000 tonnes)	671.95	60.826	603.99	50.993	- 10.1	- 16.2
7. Tobacco (Virginia flue cured)	(00,000 kg.)	452.91	35.039	343.68	30.199	- 24.2	- 14.8
8. Snuff	(000 kg.)	12.47	0.028	16.75	0.029	+ 34.3	+ 3.6
9. Sheep & lamb wool	(00,000 kg.)	79.51	9.645	58.16	5.874	- 26.85	- 39.1
10. Raw cotton (Bengal deshi)	(000 tonnes)	32.79	18.700	37.35	17.078	+ 13.91	- 8.7
11. Cotton waste (soft)	(00,000 kg.)	275.34	5.586	285.35	5.179	+ 3.64	- 7.3
12. Raw jute (including waste)	(000 tonnes)	18.69	6.771	34.98	10.585	+ 87.2	+ 56.3
13. Iron ore	(00,000 tonnes)	127.24	92.716	131.97	90.611	+ 3.7	- 2.3
14. Manganese ore (grade I)	(000 tonnes)	282.15	7.480	228.15	5.637	- 19.1	- 24.6
15. Manganese ore (grade II)	(")	438.93	9.765	397.69	7.325	- 9.4	- 25.0
16. Toilet soap	(000 kg.)	721.31	0.467	425.56	0.274	- 41.0	- 41.3
17. Cotton thread (sewing or darning)	(")	237.01	0.604	354.96	0.828	+ 49.8	+ 37.1
18. Hessian cloth	(000 tonnes)	364.88	166.048	298.36	133.356	- 18.2	- 19.7
19. Sacking cloth	(")	9.48	3.405	6.10	2.069	- 35.7	- 39.2
20. Narrow fabrics of jute	(00,000 kg.)	27.98	1.568	33.69	1.796	+ 20.4	+ 14.5
21. Cordage, cable, rope, twine of jute	(")	21.63	0.717	19.89	0.664	- 8.0	- 7.4
22. Jute fabrics woven carpet backing cloth	(000 tonnes)	104.35	67.764	134.64	83.357	+ 29.0	+ 23.0
23. Jute hessian bags	(")	89.21	41.858	58.04	26.761	- 34.9	- 36.1
24. Jute sacking bags	(")	166.20	59.498	158.61	52.700	- 4.6	- 11.4
25. Safety razor blades	(HND)	1,098.73	0.205	747.47	0.130	- 32.0	- 36.6
26. Typewriters (std. size)	(No.)	726	0.041	313	0.024	- 56.9	- 41.5
27. Sewing machines (with stand)	(")	25,152	0.404	12,369	0.229	- 50.8	- 43.3
28. Sewing machines (without stand)	(")	4,397	0.071	21,381	0.240	+ 386.2	+ 238.0
29. Ceiling fans	(")	105,056	1.534	132,639	1.755	+ 26.3	+ 14.4
30. Pedestal fans	(")	818	0.018	470	0.010	- 42.5	- 44.4
31. Table fans	(")	19,090	0.232	5,360	0.069	- 71.9	- 70.0

*June to May.

in exports in the case of different commodities is: black tea (amount of tea exported declined by 0.3 per cent but export earnings declined by 9.3 per cent) and manganese ore, grade II (amount of ore exported declined by 9.1 per cent whereas export earnings declined by 25.0 per cent). In the case of jute manufactures, however, decline in the volume of exports and export earnings is the same because the decline in prices is relatively small.

Total exports of these 31 commodities in Table III(a) amounted to \$873.002* million during June-May (1965-66) and \$782.256 million during June-May (1966-67), i.e., volume of exports of these commodities declined by 10.4 per cent. From a comparison of exports of different commodities [Table III(b) on p. 328] during April-March (1965-66) and April-March (1967-68), it is observed that the commodities which registered increase in exports (volume) are: black tea (14.0 per cent), snuff (20.7 per cent), raw cotton (16.4 per cent), iron ore (11.9 per cent), cotton thread (sewing or darning) (38.8 per cent), carpet backing jute cloth (50.0 per cent), sacking cloth (3.1 per cent), narrow fabrics of jute (29.0 per cent), twine of jute (4.4 per cent), sewing machines (complete without stand) (736.36 per cent), and ceiling fans (23.1 per cent). Of these, exports during 1959-65 were price elastic in respect of snuff, raw cotton, iron ore, cotton thread, sacking cloth, narrow fabrics of jute, twine of jute and ceiling fans. An important fact that emerges from this comparison is that value of exports lagged behind volume of exports and in certain cases value of exports declined, e.g., snuff, raw cotton and jute sacking cloth, and this is so because of the absolute decline in prices of different commodities due to devaluation. During April-March (1965-66), the value of exports of these 31 commodities was \$956.220 million and during April-March (1967-68) it was \$814.786 million which means that value of exports declined by 14.8 per cent. From a comparison of the value of exports during June-May (1966-67) and April-March (1967-68) with June-May (1965-66) and April-March (1965-66) it is observed that during the second year of devaluation exports of these 31 commodities declined more than during the first year of devaluation. The following are the additional reasons for the decline in exports of several commodities:

For jute manufactures, the decline in exports in 1966-67 is due partly to a 16.5 per cent fall in production and partly to reduced offtake by the UK, the USSR, the USA, the UAR and Argentina. For tea, the decline in exports in 1966-67 is due partly to reduced offtake by the USA, the UK and the UAR

*Using the conversion rate \$1=Rs 4.75.

TABLE III(b)

Commodity	Unit	April 1965 to March 1966		April 1967 to March 1968		1967-68 over 1965-66 (%)	
		Quantity	Value (ml. \$)	Quantity	Value (ml. \$)	Quantity	Value
1. Biscuits	(000 kg.)	988.49	0.524	799.60	0.473	- 9.1	- 10.7
2. Cashew kernel	(00,000 kg.)	360.26	43.811	359.90	43.723	- 0.1	- 0.2
3. Black tea	()	1,649.57	205.764	1,881.20	225.671	+ 14.0	+ 9.7
4. Black pepper (garbled)	()	244.18	21.916	242.26	16.921	- 1.8	- 22.8
5. Black pepper (ungarbled)	()	6.97	0.577	5.15	0.348	- 26.1	- 39.7
6. Groundnut oilcake	(000 tonnes)	673.85	61.236	586.86	49.612	- 12.9	- 19.0
7. Tobacco (Virginia flue cured)	(00,000 kg.)	475.98	36.575	467.42	43.324	- 1.8	+ 18.5
8. Snuff	(000 kg.)	12.35	0.029	14.91	0.024	+ 20.7	- 17.2
9. Sheep and lamb wool	(00,000 kg.)	77.62	9.564	56.90	4.467	- 26.7	- 53.3
10. Raw cotton (Bengal deshi)	(000 tonnes)	38.35	20.322	44.63	19.663	+ 16.4	- 3.2
11. Cotton waste	(00,000 kg.)	269.35	5.387	234.49	4.508	- 12.9	- 16.3
12. Raw jute	(000 tonnes)	18.96	6.078	12.45	3.495	- 34.3	- 42.5
13. Iron ore	(00,000 tonnes)	122.69	188.627	137.34	99.704	+ 11.9	+ 12.5
14. Manganese ore (grade I)	(000 tonnes)	233.96	6.259	178.82	4.468	- 23.6	- 28.6
15. Manganese ore (grade II)	()	397.53	9.168	279.43	4.873	- 29.7	- 46.8
16. Toilet soap	(000 kg.)	703.11	0.457	453.04	0.303	- 35.6	- 33.7
17. Cotton thread (sewing or darning)	()	243.78	0.619	338.47	0.639	+ 38.8	+ 3.2
18. Carpet backing cloth (jute)	(000 tonnes)	100.16	64.196	150.23	90.401	+ 50.0	+ 40.8
19. Hessian cloth (jute)	()	360.40	161.878	313.71	124.924	- 13.0	- 22.8
20. Sacking cloth (jute)	()	9.73	3.240	10.03	2.892	+ 3.1	- 10.8
21. Narrow fabrics (jute)	(00,000 kg.)	29.78	1.642	38.43	2.007	+ 29.0	+ 22.2
22. Twine of jute	()	26.67	0.857	27.85	0.801	+ 4.4	- 6.5
23. Jute hessian bags	(000 tonnes)	95.79	43.716	71.65	30.783	- 25.2	- 29.6
24. Jute sacking bags	()	176.99	60.604	116.75	34.768	- 34.0	- 42.6
25. Safety razor blades	(000 HND)	139.41	0.259	644.36	0.120	- 53.9	- 53.7
26. Typewriters	(No.)	743	0.044	117	0.015	- 84.2	- 65.9
27. Sewing machines (with stand)	()	23,477	0.389	7,134	0.147	- 69.6	- 62.2
28. Sewing machines (without stand)	()	4,551	0.703	38,063	4.427	+ 736.36	+ 529.65
29. Ceiling fans	()	102,502	1.512	12,606	1.688	+ 23.1	+ 11.6
30. Pedestal fans	()	906	0.019	205	0.005	- 77.4	- 73.7
31. Table fans	()	20,597	0.248	3,396	0.042	- 83.5	- 83.1

and partly to increased supply from Ceylon and East Africa. For tobacco and oilcake, reduced exports have been due to lower domestic production of these commodities.

BEHAVIOUR OF EXPORT PRICES

In order to examine the behaviour of export prices of different commodities after devaluation, the average export prices of 26 commodities in August and November 1966; in January, March and June 1967; and in March 1968; and also the average export prices during June-May (1965-66), June-May (1966-67), and June-March (1967-68), were worked out. June 1967 export prices of 13 commodities (Table IV on p. 330), viz., biscuits, cashew kernel, black pepper (ungarbled), black pepper (garbled), tobacco unmanufactured, manganese ore (grade II), hessian cloth, sacking cloth, twine of jute, carpet backing cloth, jute sacking bags, safety razor blades and sewing machines (without stand), are lower than the average prices during June-May (1966-67); and for all of them, June 1967 export prices are the lowest. For the remaining 13 commodities, average prices in June 1967 are higher than the average prices during June-May (1966-67). For the second group of commodities, however, June 1967 prices are not the highest prices except for sewing machines (with stand), and groundnut oilcake. Export prices (f.o.b.) of different commodities during June-May (1966-67), therefore, do not provide sufficient evidence that they tended to be stabilised in course of the year after devaluation. If the second year after devaluation is considered, it is observed that the unit export prices (f.o.b.) of different commodities in March 1968 and the average prices during June-March (1967-68) are broadly similar to the prices in the earlier period and there is no clear indication that export prices in general tended to get stabilised. However, it is evident that the disparity between 1966-67 and 1967-68 prices is much smaller than the disparity between 1965-66 and 1966-67 prices.

EXPORTS, IMPORTS AND DOMESTIC PRODUCTION

The volume of exports and imports of any country should depend on the volume of domestic production and the size of the home market as well as the availability of internal resources. If the home market of a country expands in proportion to domestic production, then it may be expected that exports will bear a stable relationship with domestic production. Further, if growth of domestic production is limited by the availability of internal resources and if the availability of internal resources increases in proportion to domestic production, then imports will also maintain a stable relationship with domestic production. Under the above

TABLE IV
UNIT EXPORT PRICE (f.o.b.)

(In Rupees)

Commodity	Unit	August 1966	November 1966	January 1967	March 1967	June 1967	March 1968	Average price	
								1965-66*	1966-67* 1967-68**
1. Biscuits	Kg.	3.75	5.60	3.84	2.99	3.35	5.00	2.58	3.54 4.56
2. Cashew kernel	"	10.44	10.45	9.10	8.70	8.81	9.35	5.92	9.83 8.96
3. Black tea	"	9.42	8.20	7.91	7.92	8.59	7.48	5.91	8.49 9.05
4. Black pepper (garbled)	"	6.30	5.92	5.47	5.41	5.40	5.14	4.96	5.67 5.24
5. Black pepper (ungarbled)	"	5.28	5.67	5.10	7.61	5.85	4.67	3.95	6.04 4.93
6. Groundnut oilcake	T	616.40	625.70	623.00	639.90	674.90	624.73	430.88	633.74 636.80
7. Tobacco (Virginia flue cured)	Kg.	5.09	6.34	—	7.86	6.31	11.39	3.68	6.60 6.37
8. Iron ore	T	53.53	55.34	40.50	59.62	54.19	55.78	34.68	51.54 55.36
9. Manganese ore (grade I)	"	204.56	182.72	161.60	222.19	191.36	209.25	126.08	185.45 193.02
10. Manganese ore (grade II)	"	169.76	136.37	110.17	130.84	121.49	128.39	105.89	138.26 131.17
11. Toilet soap	Kg.	4.69	5.43	5.07	4.36	5.07	4.72	3.08	4.87 4.91
12. Cotton thread (sewing or darning)	"	18.69	18.20	17.99	18.27	18.48	18.66	12.12	17.49 13.44
13. Hessian cloth	T	3,389.93	3,246.80	3,313.83	3,342.92	3,230.39	2,694.66	2,166.15	3,354.97 2,928.79
14. Sacking cloth	"	3,107.20	2,571.41	2,525.83	2,421.02	2,159.78	1,975.17	1,710.20	2,547.28 2,112.57
15. Narrow fabrics of jute	Kg.	3.61	4.27	4.29	4.17	4.16	3.84	2.67	4.00 3.96
16. Cordage, cable, rope, twine of jute	"	2.84	2.38	2.63	2.90	2.25	2.79	1.58	2.51 2.03
17. Jute fabrics woven carpet backing cloth	T	4,637.99	4,657.92	4,680.65	4,794.68	4,644.98	4,422.94	3,091.12	4,647.11 4,486.34
18. Jute hessian bags	"	3,561.57	3,429.96	3,449.48	3,511.04	3,507.38	2,808.58	2,230.50	3,461.07 3,178.68
19. Jute sacking bags	"	2,912.98	2,271.22	2,418.84	2,504.88	2,396.54	1,916.92	1,704.03	2,494.04 2,151.60
20. Safety razor blades	HND	1.55	1.31	1.34	1.29	1.19	1.97	0.89	1.31 1.45
21. Typewriters	No.	544.49	836.00	1,057.00	902.40	—	1,636.20	270.28	572.08 1,026.88
22. Sewing machines (with stand)	"	153.95	166.78	102.45	147.33	198.13	147.60	76.38	139.20 149.51
23. Sewing machines (without stand)	"	69.73	105.00	104.50	76.94	75.17	77.25	76.48	84.31 88.59
24. Ceiling fans	"	112.96	108.39	98.92	98.01	104.95	97.40	64.48	99.31 101.32
25. Pedestal fans	"	154.72	112.50	151.98	—	327.27	—	104.41	157.08 135.47
26. Table fans	"	88.36	11.981	91.63	—	107.43	104.42	57.88	97.59 92.96

* June to May.

** June to March.

set of circumstances, a country's balance of payments (in course of development) will not show signs of deterioration. If, however, the home market of a country expands at a rate faster than domestic production, then exports as proportion of internal production will tend to decline. Further, if domestic production expands at a rate equal to or faster than the availability of internal resources, imports as proportion of domestic production will tend to remain constant or increase and, as a result, the balance of payments position of the country will tend to worsen. The above may summarily be stated thus: if the elasticity of exports with respect to commodity production in a country is smaller than elasticity of imports with respect to commodity production, the country concerned will not be able to achieve improvement in the balance of payments through a higher rate of growth of commodity production alone. For an international comparison of the behaviour of growth of exports, imports and national income, the values of exports and imports as proportion of national income during 1955 and 1963 in 21 industrialised countries and 12 less industrialised countries are given in Table V on p. 332. From the Table it can be seen that exports and imports as proportion of national income of majority of the industrialised countries exhibited remarkable stability and, for the rest, the value of exports and imports as proportion of national income exhibited a rising trend. Industrialised countries in general, therefore, maintained close relationship between the growth of exports, imports and national income.

The above pattern, however, is not so uniform in the case of less industrialised countries. In some of the less industrialised countries, e.g., Yugoslavia, Argentina, Venezuela, Philippines, the value of exports as proportion of national income increased, whereas imports as proportion of national income decreased or remained stable, and in the rest including Pakistan, exports and imports as proportion of national income declined.

The equations fitted for (i) the growth of exports, national income and imports, and (ii) the growth of imports, national income and exports of industrialised countries (during 1956-63) and for India during the last decade are as follows:

(A) *Industrialised Countries:*

$$\text{Log } I = 0.2216 + 0.6030 \log Y + 0.3030 \log E \dots (i)$$

$$\text{Log } E = 0.4841 + 0.5881 \log Y + 0.1989 \log I \dots (ii)$$

(I = import; E = export; Y = national income)

TABLE V

<i>Industrialised countries</i>	<i>Exports as proportion of national income</i>		<i>Imports as proportion of national income</i>	
	1955	1963	1955	1963
1. Canada	21.2	21.5	22.4	20.2
2. USA	4.7	4.8	3.5	3.6
3. France	13.4	13.3	13.2	14.3
4. West Germany	19.7	20.2	18.4	19.0
5. Italy	10.7	14.2	15.6	21.3
6. Netherlands	42.0	42.1	50.1	50.6
7. Belgium	36.6	43.8	37.3	46.0
8. Denmark	31.0	30.2	34.6	33.7
9. Norway	23.9	25.0	41.2	42.2
10. Sweden	21.6	23.4	24.9	24.8
11. Austria	21.6	22.6	27.4	28.6
12. Switzerland	23.9	24.6	27.3	33.1
13. Japan	11.1	11.2	13.6	13.8
14. Hungary	7.5	8.7	6.9	9.4
15. Bulgaria	9.8	17.3	10.4	18.9
16. Poland	1.7	1.5	1.7	1.7
17. USSR	3.3	3.8	2.9	3.7
18. Australia	18.2	17.9	20.1	15.9
19. New Zealand	31.0	24.1	34.4	24.1
20. East Germany	4.8	6.8	4.4	5.9
21. UK	18.7	16.9	24.4	19.4
<i>Less industrialised countries</i>				
22. Portugal	18.6	16.3	25.9	25.6
23. Yugoslavia	11.6	14.2	19.9	19.0
24. Ceylon	37.6	27.7	28.4	24.0
25. India	6.2	4.4	6.9	5.6
26. Pakistan	9.7	5.9	7.0	12.6
27. Argentina	9.9	13.1	12.4	9.4
28. Chile	34.5	24.1	27.3	16.6
29. Spain	5.4	6.4	7.5	17.0
30. Turkey	8.4	5.6	13.4	10.5
31. Thailand	20.1	17.3	20.1	21.9
32. Venezuela	48.1	55.0	24.2	18.0
33. Philippines	12.4	19.5	17.0	16.6

(B) *India:*

$$\text{Log } I = 0.9406 + 1.0586 \log C + 0.3459 \log E \quad \dots (i)$$

$$\text{Log } E = 0.3258 + 0.6362 \log C + 0.1320 \log I \quad \dots (ii)$$

(I = import; E = export; C = commodity production)

For industrialised countries, the result suggests that the elasticity of exports with respect to national income (0.5881) is almost equal to the elasticity of imports with respect to national income (0.6030).

For India, however, the result is quite different, the elasticity of exports with respect to commodity production (0.6362) being much smaller than the elasticity of imports with respect to commodity production (1.0586). The elasticity of exports with respect to national income in industrialised countries and the elasticity of exports with respect to commodity production in India are fairly similar. With the estimated values of elasticity, it may be suggested that in the growth process in industrialised countries there is a built-in mechanism to restore the balance of payments equilibrium, whereas in the case of India the built-in mechanism in the growth process is to worsen the balance of payments position. Thus, with the given structures of production as well as export and import trade (as in the values of elasticities estimated), it is difficult to reconcile that faster rate of growth of commodity production alone will succeed in establishing equilibrium in the balance of payments in India. We here examine the growth of exports, imports and commodity production during 1965-66 and 1966-67 in the context of the estimated elasticities. In India, during 1965-66 and 1966-67 commodity production increased by 3 per cent, whereas exports and imports declined by 11 per cent and 11.8 per cent respectively. In the light of the estimated equations, however, this should mean a 4.3 per cent increase in imports and 2 per cent increase in exports. Devaluation thus seems to have been relatively effective to enhance import substitution and also to divert the flow of goods to domestic markets. With 1965-66 exports equal to 100, 1966-67 exports should have been 102 but were 88.9 which means that during 1965-66 and 1966-67 the potential reduction of exports had been of the order of 13.7 per cent, and similarly, potential gain through import substitution was of the order of 14.2 per cent. A comparison of 1967-68 trade position with that of 1965-66 also indicates similar trends, for in 1967-68, imports declined even faster than exports.

SUMMARY AND CONCLUSIONS

Expansion of trade and improvement in the balance of payments position in India are beset with some inherent difficulties.

Firstly, the bulk of Indian exports (especially the traditional commodities) is not price elastic and, secondly, the elasticity of imports with respect to commodity production is higher than the elasticity of exports with respect to commodity production. Because of the first shortcoming, the incentives and measures designed to promote exports as also the recent devaluation of the rupee tend to prove a triumph of theoretical thought over practical experience.

Trade circles maintain that the export duties levied on several traditional items, e.g., jute, tea and mineral ores, have been responsible for the post-devaluation decline in export earnings from these commodities. A comparison of the post-devaluation export prices of these commodities with the export prices of the earlier years indicates that the post-devaluation export prices are in no case higher than the earlier prices (in constant dollars) and, secondly, the exports of these commodities were not price elastic. It is not, therefore, correct that decline in exports of the taxed commodities has been due to the imposition of export duties. A comparison of the quantities of each commodity exported and the value realised suggests that decline in value has always been more than the decline in quantity and this is simply because of the decline in prices. This evidence does not substantiate that export duties adversely affected exports. The case against export duties may, however, be argued by the plea that the exporters of different commodities themselves could avert a decline in external prices (by quoting higher prices) and earn windfall profit to their advantage. If it is so, export duties certainly have eaten up the expected windfall profits of exporters. Is then, the decline in exports the result of resentment of exporters against the imposition of export duties which seemingly have eaten up the prospective gains they expected of devaluation?

An examination of the export performance of different commodities during 1959-65 and also in recent years suggests that the markets for Indian export commodities abroad are not stable. India must pay sufficient attention to stabilise her markets abroad. This calls for careful studies of different markets and of marketing techniques followed by competing countries on a continuous basis. Since the largest part of India's external trade is confined to a few countries, viz., the UK, the USA, Canada, Japan, the USSR and the UAR, the setting up of an organisation for marketing and commercial intelligence may be very helpful. During June-May (1965-66), the value of exports to these six countries was \$1,053.959 million, and during June-May (1966-67) it was \$958.603 million. As a proportion of total exports, these were 62.9 and 63.4 per cent in 1965-66 and 1966-67 respectively. Imports from these six

countries also were of the same magnitude, i.e., 62.4 per cent in 1965-66 and 61.7 per cent in 1966-67.

For Indian producers, the home market so far has been characteristically a sellers' market. Nonetheless when new products are to be marketed, producers take immediate and effective steps to advertise their products through mass media. They also make adequate arrangements to promote sale of their products through well-established agency houses in different parts of the country. When Indian products are to enter distant and competitive markets of the developed countries, which are essentially buyers' markets, much more attention has to be paid to marketing techniques.

In India, total net revenue that has been collected during June-December 1966 (seven-month period of devaluation ending December 1966) and during April-March (1966-67) is Rs 78.84 crores and Rs 116.34 crores respectively. A part of the annual revenue, now being realised from various export duties, may be set apart to defray the cost of organisational and marketing arrangements which may be thought necessary for setting up stable markets and for promotion of exports abroad.

In India, the trends in commodity production, exports and imports during the last decade exhibited that elasticity of imports with respect to commodity production is higher than the elasticity of exports with respect to commodity production. This rules out the possibility of reducing the trade balance gap through a higher rate of growth of domestic production, with the result that expansion and diversification of export trade and improvement in the balance of payments position appear as two distinctly different phenomena.

The reversal in the above trend after devaluation, e.g., imports declining at a rate faster than exports, when commodity production increased, points to two conclusions: firstly, that import substitution has been carried out on a large scale, and, secondly, that the flow of export commodities has been diverted from external markets to the home market. Of these, the former indication is desirable but not the latter. But whether the reversal, referred to above, is merely a temporary phenomenon or otherwise cannot be ascertained from just two years' experience.

Persistent balance of payments deficit in India is also due to huge food imports, so a long-term solution requires that this component in the import trade must be eliminated through self-sufficiency in foodgrain production.

In 1963-64, food imports accounted for 17.5 per cent of total imports and 50 per cent of the balance of payments deficit; in

1964-65, food imports accounted for 23.9 per cent of total imports and 60.6 per cent of the balance of payments deficit; and in 1965-66, food imports accounted for 24.5 per cent of the balance of payments deficit. It is, therefore, very important that along with all the other measures to step up exports and reduce imports, self-sufficiency in foodgrain production, although outside the field of international trade, is achieved. Only then will India's balance of payments be improved substantially and permanently.

EXPORT POTENTIAL SURVEY OF FRESH AND PROCESSED FRUITS AND VEGETABLES*

ENDOWED with diverse geographical and climatic conditions, India produces a wide range of fruits and vegetables, tropical and temperate, annual production being estimated at about 20 million tonnes. In recognition of the importance of production of fruits and vegetables as a valuable supplement to the food resources of the country and as a sector offering sizable export prospects, increasing attention has been paid, in recent years, to gear up this industry to achieve the dual objectives. The progress achieved so far in the sphere of production and exports, however, has not been adequate. India's share in annual world exports of about \$7 billion is only \$9 million (Rs 67 million).

India's exports of fresh fruits and vegetables, amounting to 109,932 tonnes (Rs 48.8 million) during 1967-68, represent a small proportion of the total production of the country. Besides, onions alone accounted for about 93 per cent (103,362 tonnes valued at Rs 41.8 million) of the aggregate exports mainly directed towards South-East Asian markets. Next in importance are bananas (2,813 tonnes), mangoes (1,072 tonnes), potatoes (547 tonnes) and the rest comprising a wide range of commodities. Out of the total production of processed fruits and vegetables of about 47,180 tonnes, India's exports amounted to 6,189 tonnes (Rs 18.4 million) in 1967-68. Of the aggregate exports of processed items during 1967-68, mango juice, exported mainly to the USSR (about 2,000 tonnes) and Kuwait (about 1,000 tonnes), amounted to 3,300 tonnes (Rs 7.9 million) and mango pickles and *chutneys* 1,389 tonnes (Rs 4.1 million). Among the rest, dried mushrooms (Rs 2.2 million) constitute an important export item.

World Trade: International trade of fruits and vegetables is of vast dimensions. Average annual trade turnover, on global scale, is estimated at \$7 billion, fresh fruits and vegetables accounting for \$5 billion and the processed products for the rest. Significant items which enter international trade include bananas (4.7 million tonnes), citrus (4.5 million tonnes), apples (2 million tonnes), potatoes (3.5 million tonnes) and tomatoes (1 million tonnes),

*Based on a comprehensive survey of fresh and processed fruits and vegetables in 22 countries of Europe, West Asia and South-East Asia by the Indian Institute of Foreign Trade on an assignment from the USAID.

among the fresh produce, and canned fruits (1 million tonnes), fruit juices (100 million gallons) and tomato products (0.5 million tonnes) among the processed products.

Western Europe, as a region, is the single largest importer of horticultural commodities amounting to \$3 billion per annum. While a major portion of its imports is accounted for by intra-European trade, over 40 per cent of the supplies originate from non-European sources. The USA, whose annual average imports range between \$500 million and \$600 million, is the second largest buyer of fresh and processed fruits and vegetables. South and Central American countries and countries of South-East Asia (Philippines and Taiwan) principally meet the US market requirements. Importing countries in West Asia (Kuwait, Bahrain, Iraq and Saudi Arabia) and South-East Asia (Hong Kong, Malaysia and Singapore) heavily depend upon their neighbouring producers like Lebanon and Jordan, and mainland China and Thailand respectively for their supplies of fresh and processed fruits and vegetables.

Preferential Systems: Increasingly, major importing countries of fruit and vegetable items are tending towards procuring supplies at cheaper prices from within the economic groupings. For instance, the European Economic Community is quite inward-looking in its quest for imports of fruits and vegetables, the supplies mainly emanating from Italy, France and the Netherlands. For its requirements of tropical fruits, the EEC countries are attempting to obtain supplies from the Associated Territories on a preferential basis. Similarly, countries like Australia, New Zealand and South Africa primarily direct their products to the UK under Commonwealth preferences. Jordan and Lebanon in West Asia export mainly to countries of the Arab Common Market which provide free access to their produce.

Efforts to scale down the impact of such preferential trading practices on the exports of horticultural commodities of the developing countries have already met with considerable success as is evident from the fact that major consuming countries like the USA, the UK, Japan and Canada, and the countries of the European Economic Community have offered concessions of varying degree under Kennedy Round Negotiations. This has provided greater impetus for the expansion of international trade in fresh and processed fruits and vegetables, especially for the exports of the developing countries.

Opportunities: The striking successes achieved by Israel, Taiwan, Malaysia, Philippines, Kenya and Morocco in the field of horticultural exports, in recent years, underline the fact that export

opportunities in the world markets are not lacking even now for countries which attempt at efficient production and marketing. Significant factors which strengthen this conclusion are given below:

- (i) Climate is a major constraint in Europe for round the year production and as a result imports will continue to remain during well-defined off-seasons.
- (ii) Per capita consumption of fruits and vegetables in Europe is growing fast in view of the rising living standards. Simultaneously, greater emphasis is being laid on quality items and convenience packages.
- (iii) Countries of East Europe, West Asia and South-East Asia are emerging as major importing countries of fresh and processed fruits and vegetables, especially tropical fruits.

Viewed against this background, India's performance in the field of horticultural exports is insignificant. It has hardly made use of the off-seasonal advantages it enjoys in the European markets in respect of certain fruits and vegetables, the geographical proximity to markets in West Asia and South-East Asia, the large overseas population of Indian and Pakistani origin, and the relatively low labour costs within the country. India's share in the exports of fruits and vegetables is very little and there is need to evolve effective measures for strengthening the horticultural base and developing appropriate marketing machinery to meet the highly organised and competitive world markets.

STRATEGY FOR DEVELOPMENT

The Survey has brought into focus the various important problem areas in respect of the development and expansion of production base and exports of the fresh and processed fruits and vegetables. In respect of these individual problem areas, an attempt has been made in the Report to recommend effective action for implementation. The various problems and the suggestions connected with them appear in the paragraphs that follow.

NEED FOR INSTITUTIONAL SET-UP

The successful operation of Citrus Marketing Board, Vegetable Producing & Marketing Board, and Agricultural Produce Export Corporation (AGREXCO) of Israel, Jamaica Banana Board, Australian Apple & Pear Marketing Board and Kenya Fruit & Vegetable Marketing Board highlights the need and efficacy of

institutional development in the horticultural production and export trade.*

At the present stage of horticultural and marketing development in India, it is difficult to visualise the possibility of private trade undertaking the difficult task of nurturing, expanding and developing the export markets in fresh fruits and vegetables on a large scale. In most cases, the problems will need to be tackled right from the stage of production through procurement, grading, packing, etc., to that of placing the produce in the consuming markets in a systematic manner. Further, the export promotion of fruits and vegetables will need to be based on "Package Programme" approach.

Against this background, there is need for creation of three All-India Organisations—one for augmenting exports of bananas, the second for developing exports of other fruits and vegetables, and the third for effecting accelerated exports of processed fruit and vegetable items.

Banana Development and Export Corporation: For the development of banana exports on an integrated basis, a central organisation—Banana Development and Export Corporation—has been suggested, which should be set up in the shape of a commercial corporation. It is suggested that the Corporation should be modelled on the lines of the Jamaica Banana Board, with due alterations. Initiative for setting up this organisation should be taken by the Ministries of Food and Agriculture, and Commerce, Government of India, in consultation with the States which have interest in the production and export of bananas. The Corporation should be developed in such a manner that existing organisations could be merged into it by participating in the share capital. It will be desirable to secure association of the producers with the Corporation, but the association of the cooperatives of producers should receive preference. Following are some of the major functions which would need to be undertaken by the proposed Corporation:

- (i) Organisation of field tests for determining the appropriate varieties which will be most suited for cultivation in the respective areas from the point of view of exports;
- (ii) selection of suitable areas for development of production;
- (iii) establishing rapport with the cooperatives of growers as well as individual growers for securing supplies on long-term basis;

*The Report embodies salient features of these organisations.

- (iv) provision of necessary inputs, financial assistance and credit to the growers' cooperatives and growers; and
- (v) effective promotion and publicity measures.

Fruits and Vegetables Export Corporation: The Survey has revealed that prospects for exports of fresh fruits and vegetables from India are considerable. For items like mangoes, lychees, grapes and strawberries, and vegetables like aubergines, capsicums, onions and French beans, ready markets are available in Europe and Asia, and if the existing potential has remained untapped so far, it is mainly because of the lack of organised effort in the past. There is, therefore, a strong case for the creation of a central agency—Fruits and Vegetables Export Corporation—to organise production, procurement and export marketing of selected fruits (other than beans) and vegetables. The Corporation, it is suggested, may be set up on the model of AGREXCO of Israel. While the structure of this Corporation will be similar to that of Banana Corporation, its functions *inter alia* will include:

- (i) Instituting necessary research activities in cooperation with other professional organisations in order to improve the efficiency and productivity of horticultural industry in India;
- (ii) organising production of the required fruits and vegetables on a planned basis, and according to seasons, regions and varieties;
- (iii) providing technical guidance to the producers and producers' cooperatives on improved methods of cultivation;
- (iv) providing necessary inputs, financial assistance and credit to the growers' cooperatives and growers; and
- (v) creating a national trade mark for Indian fruits and vegetables and undertaking publicity programme on a regular basis in the foreign markets.

Processed Fruits and Vegetables Exporters' Consortium: Having regard to the highly competitive nature of international trade in processed fruits and vegetables, there is great need of bringing about effective regulation of export marketing. The success of countries like Australia, South Africa and Malaysia in this field is mainly attributable to the efficient functioning of powerful marketing boards, which exercise effective control over the entire range of operations, including fixation of floor prices.

Taking the existing factors and problems into consideration, it is suggested that ways and means should be explored for encouraging the formation of a consortium of processors and

exporters which could evolve a unified approach to marketing, preferably undertaking marketing of products under a common brand and at agreed prices. The consortium should have the authority to ensure conformity of products to accepted standards. The consortium will be the appropriate agency to draw upon the resources of the Marketing Development Fund of the Government of India for opening overseas offices, undertaking overseas publicity and carrying out market surveys.

If the formation of a separate consortium is for any reason not feasible in the short run, the functions of the existing Processed Foods Export Promotion Council should be suitably enlarged so that effective regulation of export marketing becomes possible.

PRODUCTION

Varieties: Production of suitable varieties constitutes a basic prerequisite for developing export markets on a continuous basis. For instance, world trends in banana trade show a definite shift in favour of Cavendish varieties like Lacatan, Valery and Giant Cavendish, which are not currently grown in India. In respect of oranges, India does not cultivate varieties like Washington Navel, Shamouti, Satsuma (for canning purposes) and Valencia Late, which are presently in demand in international markets. In the case of peaches, the production of which is small, India does not produce varieties like Cardinal, J.H. Hale, Vivian and Everts. Varieties of melons such as Honey Dew, Ogen and Charentais preferred in European markets are not commercially produced in the country. White fleshed Spanish variety of onions, not presently cultivated in India, is likewise preferred in world markets. Varieties of tomato such as San Marzano and Roma, suitable for manufacture of peeled whole tomatoes and tomato concentrates produced currently in Italy and the USA, are not at present grown in India.

It follows from these examples that it is of vital importance to develop the production of suitable varieties of fruits and vegetables, including strains of established varieties adapted to local conditions, with a view to building up the horticultural industry in the country on modern lines. Varieties chosen should be vigorous in growth, heavy yielding (both in field and processing), resistant to pests and diseases and such as can withstand the hazards of long haulage. The Survey has estimated the requirements of nurseries (bananas, pineapples, Satsumas and others) at Rs 15 million over the next five years.

The Indian Council of Agricultural Research and the State Horticultural Departments, together with the National Seeds

Corporation, should make vigorous efforts to evolve requisite varieties and take effective steps to extend their cultivation.

Yields: By application of modern technology and scientific cultural practices, the major supplying countries of the world have been able to achieve high field yields and processing yields in respect of many fruits and vegetables. For instance, the field yield of oranges (Washington Navel) obtained in Spain is about 30 tonnes and in Italy 17 tonnes as against 10 tonnes (Mosambi) per hectare in India. In respect of pineapples, whereas the yield in Philippines (canners' estates) and Ivory Coast ranges from 60 to 70 tonnes per hectare, it is only 12 to 15 tonnes in India. The yield of onions per hectare is 32 tonnes in the USA and 28 tonnes in the Netherlands while in India it averages only 9 tonnes. In the case of potatoes, as against 26 tonnes per hectare obtained in the Netherlands, yield in India is only 7 tonnes. The tomato cultivation in major producing countries like the USA, Italy and France has been developed to the extent of yielding 25 to 30 tonnes per hectare in contrast to the average yield of 10 tonnes in India.

It is necessary to launch a vigorous drive for raising the general level of field yields of major crops in demand in the overseas markets to withstand competition from world's leading suppliers. The Survey emphasises the need for stepping up the current yield of pineapples, among others, from 15 tonnes per hectare to 45 tonnes by 1975, bananas from 25 tonnes to 30 tonnes, apples from 7 tonnes to 15 tonnes, onions from 9 tonnes to 20 tonnes, tomatoes from 10 tonnes to 25 tonnes and potatoes from 7 tonnes to 15 tonnes. Besides, it envisages commercial production of mandarin oranges yielding 15 tonnes by 1975.

Cultural Practices: Equally significant in securing quality produce are methods of cultivation and harvesting. In the canners' estates in Philippines, for instance, the yield per hectare is one of the highest in the world averaging 65 tonnes, though in other parts of the country the yield is as low as 10-12 tonnes per hectare. Further, through application of suitable hormones, availability of the fruit round the year is ensured. Thus, research undertaken on a continual basis to ascertain the optimum number of plants per hectare, composition and dosage of fertilisers to be applied, utilisation of pesticides and insecticides, etc., has paid rich dividends in the advanced countries. The Indian Council of Agricultural Research should intensify its efforts to bring about improvement in the methods of horticultural cultivation in India so as to step up yields and ensure quality of the produce. The Survey envisages an investment of Rs 160 million for intensive development of existing areas and for bringing new areas under horticultural crops over the next five years.

Methods of Harvesting: Efforts are continually being made in the advanced countries to introduce mechanical harvesting wherever possible. For instance, the "palmetta" system originally developed by Italy for peaches is becoming increasingly popular and is being extended to other fruits. Further, mechanical harvesting of tomatoes, which essentially contributed to the revival of the Californian tomato industry by cutting the harvesting costs by 50 per cent, is gaining increasing importance. Though these labour-saving devices are not of immediate relevance to the Indian circumstances, they should be kept in view to bring about improvement in harvesting methods from time to time.

Procurement: Structural changes in the fruit and vegetable marketing system have brought in their wake a new complexity in the methods of procurement. The old order—from a small individual farmer through the itinerant merchant through the terminal market to wholesaler/exporter—no longer prevails in most of the supplying countries. Instead, the farmer directly sells to co-operatives, corporate organisations or processors under contractual obligations. This has led to a healthy integration of production, procurement and marketing, resulting in large-scale operations concentrated in fewer hands. The French SICAs (Societe d'Interet Collectif Agricoles), Spanish Syndicates (Syndicat Des Fruits et Produits Horticoles) and British Producers' Cooperatives are indicative of this growing trend. Growers should be encouraged to form cooperatives, which should be affiliated to the proposed Fruits and Vegetables Export Corporation.

Ceiling on Land Holdings: Significant improvements have been achieved in major supplying countries in yields as well as quality of the fresh produce through large-scale operations facilitating intensive cultivation on scientific lines. These improvements are of as much significance to the processing sector as to the fresh sector of the horticultural industry, and many leading overseas processors have their own plantations/farms. In particular, vertical integration of operations has made material contribution to economies in production costs in the world pineapple processing industry. Pineapple canneries in Malaysia, for instance, are statutorily required to own a minimum plantation of 1,500 acres (607 hectares) each, while pineapple packers in Taiwan are required to ensure that at least 30 per cent of the total requirements of fresh fruit are met from their own plantations.

It is evident that to facilitate application of modern techniques of cultivation, land holdings should be of a minimum economic size. In this context, the existing ceilings on land holdings, at 25-30 acres in most of the states, do present a problem. Certain exemptions

are allowed in the various state acts in respect of certain types of holdings, plantation crops like tea, coffee and rubber, and sugar-cane farms operated by sugar factories. As regards horticultural crops, while orchards are exempted from land ceiling acts in certain states, no such provision exists in respect of vegetable crops in any state. Even in the case of orchards, complete exemption is made only in Andhra Pradesh, Himachal Pradesh, Jammu & Kashmir, Punjab, Haryana, Rajasthan and West Bengal, the only provision, in some of these regions, being that the holding should comprise a reasonably compact area.

On the other hand, there are provisions in most state acts to exempt (a) farms run by approved cooperative societies, and (b) land required in connection with the operations of any approved industrial undertaking. Depending on the discretion of the concerned state government, it is perhaps possible, under these provisions, for progressive units to acquire adequate land for the purpose of cultivating the required fruit and vegetable crops. However, acquisition of adequate land exclusively for cultivation of the fresh crops, with the object of marketing such crops in the fresh form, seems to be possible, even under these provisions, only in the cooperative sector and not in the corporate sector.

In view of the complexities involved in the problem, it is recommended that a high-level conference should be convened, under the auspices of the Planning Commission, of senior representatives of Departments of Agriculture of the Centre and all States and Union Territories to determine what additional measures, from legislation and other stand-points, need to be taken, in order to facilitate acquisition of holdings of adequate size, which represents an important prerequisite for building up a modern horticultural industry in the country.

GRADES, STANDARDS AND PACKING

Grades and Standards: The Directorate of Marketing and Inspection has evolved "Agmark" grade standards for selected fruits and vegetables and has also initiated a scheme for providing grading facilities at the farmers level. However, the success achieved in this field so far is very limited. In 1965-66, for instance, only about 6,000 tonnes of vegetables were graded according to the Agmark standards. On the other hand, major producing countries are adopting rigorous grades for fruits and vegetables marketed in the internal and external markets. OECD standards give an indication of the minute details into which these standards go such as diameter of the fruit, juice content and permissible greenness (as a proportion of the total surface). Large improvements in India are,

therefore, imperative in respect of grading of fresh fruits and vegetables for meeting the export market requirements.

The standards laid down for the processing items in India under Fruit Products Order 1955 and administered by the Nutrition Board of India,* Union Ministry of Food and Agriculture, could hardly meet the overseas market requirements, as they are only minimum standards. The importing countries of processed fruits and vegetables in the West, however, are enforcing rigid statutory health regulations, both for local and imported products. Besides, under the auspices of WHO/FAO, a Joint Committee has been set up to evolve common international standards for processed items.

Scrupulous application of health regulations and rigorous quality control and inspection methods adopted in the European countries clearly underline the need for raising the Indian standards to the level of those obtaining in the advanced countries. The Indian Standards Institution has since recently been formulating comprehensive grades and standards for fruits and vegetables, fresh and processed. It is suggested that these standards should be made obligatory after ensuring that they conform to international standards.

Packing: Although nothing specific is usually mentioned in the standards as regards the pattern of packing to be adopted, it is necessary that India should fall in line with the improved methods of packing that are widely in use in the horticultural field. For instance, pre-packing of fruits is now very common, most fruits being individually wrapped in tissue paper and placed in cartons. Cell packing has come to stay in the marketing of fruits such as apples and pineapples, and vegetables like aubergines. Tray packing is becoming increasingly popular in fruits and vegetables like apples, strawberries and capsicums. Bruce boxes are extensively used in exports of oranges, tangerines, clementines and grape-fruits. The idea of the conventional wooden boxes will, therefore, have to be discarded as far as export marketing is concerned. Further, individual operations are being incorporated into processing chains accomplishing all packing operations, inclusive of labelling and price marking on the individual packs. These facilities are totally lacking in India. It is necessary that well-equipped packing houses should be set up in centres of horticultural production and that adequate supplies of packaging materials are ensured. The Survey has assessed the need of establishing 10 modern packing houses at an approximate cost of Rs 250,000 each.

*Till recently FPO was administered by the Directorate of Marketing and Inspection, Nagpur.

TRANSPORTATION AND WAREHOUSING

Road and Rail Transport: The use of refrigerated trucks and air-cooled rail wagons is extensively witnessed in major supplying countries, both for internal movement of produce and for export to the neighbouring countries. European countries, for instance, have pooled their refrigerated and air-cooled wagons and have formed an inter-governmental organisation, International Frigovifique (INTERFRIGO), to manage their operations efficiently. Similarly, the refrigerated trucks are operated by TRANSFRIGORROUTE EUROPE throughout the Continent on identical lines. It is recommended that the Indian Railways, in consultation with the proposed Banana Development and Export Corporation and the Fruits and Vegetables Export Corporation, should acquire adequate number of refrigerated/air-cooled wagons and organise a common pool for efficient movement of the fresh produce. The Survey proposes an investment of Rs 15 million for acquiring 20 refrigerated trucks and 50 air-cooled wagons during the next five years.

Refrigerated Ships: Lack of adequate shipping facilities in India represents one of the major handicaps in the way of increased exports, particularly of fresh fruits and vegetables. Discussions with importers in Kuwait, Singapore and Malaysia have confirmed that there is considerable scope for stepping up exports of different varieties of fresh fruits and vegetables, provided there is fast and efficient shipping service between India and the West Asian and South-East Asian countries. It is estimated that with a moderately fast ship (16 to 18 knots), it should be possible to cover the distance within 100 hours. It is suggested that the Shipping Corporation of India should, in consultation with the proposed two Corporations, acquire and ply fast moving ships with sufficient provision for refrigerated cargo.

Major suppliers of bananas like Ecuador, Ivory Coast and Honduras ply their own banana boats equipped with horizontal cooling system, with capacities ranging from 2,000 to 5,000 tonnes and speeds between 16 to 21 knots and upward. Chartering of banana boats by leading exporting countries on a long-term basis is also a common feature. Chartering of such boats is vital for large-scale expansion of India's exports of bananas.

Air Shipments: In recent years, shipment by air has become fairly common. Air shipments of Californian fresh fruits and vegetables, for instance, totalled 14.2 million kg. billing weight (10.7 million kg. net weight) during 1966. The Sea Bound World Airlines, which operates cargo planes, moved 500,000 kg. of fruits and vegetables during the first six months of 1967. Israel has been airlifting, on an average, 100-150 tonnes of avocados, strawberries,

capsicums, aubergines and salad type vegetables daily to the European markets for the past two years. It will be advantageous for India to follow the same strategy, especially with regard to mangoes, lychees, strawberries, grapes, capsicums, French beans and aubergines. However, considering the element of high cost of freight—\$0.45 per kg. to the UK, which is almost equal to the acceptable c.i.f. price for mangoes—it will be necessary to offer adequate subsidy on freight in the initial stages.

Warehousing and Cold Storage Facilities: Major supplying countries, as a rule, ensure adequate provision of warehousing and cold storage facilities at the packing houses, assembling points, rail and road heads and loading and unloading ports and terminal markets. In the absence of such facilities in India, not only does wastage occur to the extent of some 30 per cent of the aggregate production of fruits and vegetables, but domestic and export marketing is rendered costly and difficult. The Survey has estimated an investment of Rs 7.5 million for establishing 15 warehousing and cold storage centres over the next five-year period.

PROCESSING

Sugar: The controlled price of about Rs 170 (\$23) per quintal, at which sugar is made available to the industry for export purposes, is three to four times high as compared to the prices at which other countries obtain sugar for export purposes. For instance, among the Survey countries, price at which sugar is made available to processors for export purposes ranges from \$6 per quintal in France and the UAR to \$10 per quintal in Spain and Singapore. Sugar is provided to the processing industry at a uniform price of \$8 and \$10 per quintal in Denmark and Singapore respectively, without any discrimination between the domestic and export markets. On the other hand, in Lebanon sugar is made available at the rate of \$9 per quintal for export production, as against \$20 per quintal otherwise payable. The discrimination between export and domestic market is more pointed in the UAR, where sugar is offered for export purposes at \$6 per quintal as against \$36 per quintal for the domestic market.

The cash subsidy allowed on sugar-based products does not compensate adequately for the differential obtaining between the prices in India and other competing countries. Furthermore, while sugar is made available at controlled price for export purposes, exorbitant prices of about Rs 300-400 per quintal have to be paid for requirements relating to the domestic market, which is far more important to the processing industry at present. The high prices at which the products have consequently to be offered in the

domestic market have been responsible for the stunted growth of the domestic demand. It is, therefore, necessary that adequate assistance should be forthcoming from the Government in this respect.

Considering that a sound domestic base is essential for sustaining the export effort of the industry, it is recommended that the entire requirements of the processing industry, covering domestic as well as export markets, should be made available at controlled prices. It may be mentioned that the total annual requirements of sugar for the processing industry amount to no more than 15,000 tonnes which represents less than 1 per cent of the total output of sugar in the country. The analogy of pharmaceutical industry, for which sugar is made available at controlled price to meet the entire requirements, is relevant in this context.

As regards the quality, adequate supplies of carbonation sugar are still not available to the industry, although the unsuitability of the sulphitation sugar for processed products has been pointed out time and again. Besides, the grades available at the controlled prices are usually not above "C". In order to bring about improvements in the quality of output, it is essential that top grades of sugar, comparable to the canners' sugar commonly used in other countries, should be made available to the industry at controlled prices.

Cans: Cans represent a major cost element, accounting for 30 to 40 per cent of the total cost of production in respect of most of the processed products. Can costs, therefore, merit close attention in any effort to secure reduction in production costs.

Current tinplate requirements of the processed fruits and vegetables sector, estimated at 5,000 tonnes, are being met entirely from imports, as domestic production of the particular type of tinplate required has not come up to acceptable standards yet, mainly because of the high proportion of phosphorous and silicon contents in the base steel used. Till such time as the requisite improvements in domestic production could be brought about, there seems to be no alternative to continued dependence on imports.

There are wide variations in the prices of tinplate imported from different sources, depending upon the availability of free foreign exchange and aid funds. The USA is the costliest source, average price payable being about Rs 2,000 per tonne c.i.f. irrespective of the terms of payment. Imports from other sources like Japan, Netherlands, West Germany and the UK are considerably cheaper, average c.i.f. price varying around Rs 1,250 per tonne, for tinplate of comparable quality, when payment is made in free foreign exchange. But prices are pegged up considerably higher, up to about Rs 1,600 per tonne, when imports are effected under credit

arrangements. It may be mentioned that about 20 per cent of the imports during 1967-68 were financed from free foreign exchange resources, the balance having been covered by aid funds.

High c.i.f. prices lead to a proportionate rise in the incidence of customs duty, which is levied at the rate of $27\frac{1}{2}$ per cent *ad valorem*, although the countervailing excise duty remains unaffected at Rs 375 per tonne. Consequently, the difference in landed cost can exceed Rs 1,000 per tonne, depending upon the source of imports.

The export drawback on tinplate at the rate of Rs 888 per tonne more or less covers on the average the customs and excise levies, making can prices for export requirements by and large comparable with international prices. However, the procedure for payment of drawbacks needs to be streamlined so as to avoid the inordinate delays currently being experienced by exporters. Frequent revisions in the drawback rates should be avoided. Prices of cans for meeting the requirements of the domestic market, however, remain exorbitantly high, in the absence of any such assistance, resulting in retarded growth of the domestic demand. Considering that a sound domestic base is essential for sustaining the export effort, it is recommended that imports of tinplate, to meet the entire requirements of the processing sector (which currently amount to only about 5,000 tonnes against the total of 65,000 tonnes, representing the aggregate import requirements of all industries) should be financed, as far as possible, with free foreign exchange, so as to bring down the import prices of tinplate and thus secure reduction in can prices.

Apart from raising the quality of tinplate currently produced in the country, efforts should be made to catch up with the latest improvements in technology. Facilities should be provided for producing lithographed cans in the country, which are becoming increasingly used in world markets by allowing adequate imports of the requisite steam-resistant inks, varnishes, coatings, etc., till such time as these materials can be produced indigenously.

The Survey estimates that commensurate with the targets of exports proposed, requirements of tinplate would amount to about 2,500 tonnes by 1970-71 and 30,000 tonnes by 1975-76, as against the current export demand of 1,000 tonnes. If the likely rise in requirements of the domestic market are also taken into account, total demand of the processing sector for tinplate would be much higher. Apart from ensuring adequate supplies of tinplate, there is need to examine whether the existing can fabrication capacity in the country would be sufficient to meet the additional requirements. In the event of expansion of capacity, which will probably

be necessary, advantages that can accrue from decentralisation of the fabrication industry merit consideration.

Corrugated Boxes: Corrugated board is one of the most commonly used packing media in view of its versatile nature, making it suitable for packing a wide range of products, amenability to high speed automatic operations, low cost, light weight and ease in stacking and handling. Major supplying countries are almost universally packing fresh and processed fruits and vegetables in corrugated boxes for domestic as well as export markets.

While appreciable progress has been made in recent years, the Indian corrugated industry has a long way to go to catch up with the modern trends in this field. Carton costs in India are twice as high compared to those in the advanced countries, and considerable improvements are called for in quality. The use of corrugated cartons in packing fresh fruits and vegetables is negligible in the country at present. Considerable proportion of exports of processed products, particularly mango juice and nectar, goes in corrugated cartons, although their use in the domestic market is limited. The Indian Institute of Packaging has recently succeeded in persuading the Railway Board to accept corrugated cartons containing tinplate containers on a trial basis at Railways' risk. Depending upon the eventual acceptance of the corrugated packing by the Railways, a spur in domestic demand for this packing medium is expected, leading to possible reduction in carton costs.

Leaving out fresh vegetables like onions and potatoes packed mostly in gunny bags and string bags, and fruits like oranges and mandarins, for which bruce boxes represent the accepted type of packing, it is expected that a substantial proportion of exports of fresh and processed fruits and vegetables will take place in corrugated boxes. The Survey estimates the corrugated board requirements for exports of fresh and processed fruits and vegetables to go up from about 200 tonnes in 1967-68 to 15,000 tonnes by 1975-76.

Machinery and Equipment: Machinery and equipment used by the processing industry in India leaves much scope for improvement by way of rationalisation and modernisation. Equipment like automatic filling machines leads to considerable savings in costs through minimisation of wastage in the production process and great efficiency in operations. Equipment like automatic labelling machines (which are commonly used in other countries) is necessary for giving a proper finish to the pack. Adequate foreign exchange should be made available for importing such equipment. There are other expensive types of machinery such as vacuum evaporators, which can be advantageously manufactured within the country by inviting technicians from abroad. Similarly, for setting up new

processing plants or expanding existing ones through installation of new modern equipment, it may be advantageous in certain cases to secure the services of plant managers and other technical personnel who can offer expert advice on lay-out, etc., for a short period. The Government should offer requisite facilities for importing such technical services wherever necessary.

The Survey has assessed the requirements of the processing industry and envisages an investment of about Rs 110 million over the next five-year period. It is contemplated that (a) assistance will need to be given to 10 selected units for modernisation, rationalisation, expansion, etc., (b) eight new processing units will need to be set up for the manufacture of orange segments, pineapple products, and (c) provision will need to be made for development of ancillary industries like packaging, machinery manufacture, etc.

MARKETING AND DISTRIBUTION

Marketing Arrangements: It is essential to establish effective marketing facilities in consuming countries. For example, the Citrus Marketing Board and Agricultural Produce Export Corporation (AGREXCO) of Israel have exclusive agents in all the European markets for organising auctions and distribution of different fruits and vegetables. On the basis of market intelligence provided by the agents, Israeli export organisations adopt suitable marketing strategies in terms of price fixation and sales promotion. In the case of bananas, all the major supplying countries have established tie-up sales arrangements with leading importers on a long-term basis for supply of stipulated quantities at pre-determined prices.

The trade in processed items is highly competitive, and unless established importers can be persuaded to take interest in products of new entrants like India, it will be difficult to gain successful entry into the European markets. Processed items are handled mostly by importers/distributors, national chains, cooperative buying associations and distributors/retailers-buying groups. In general, repacking units import their requirements directly under suitable tie-up arrangements.

The proposed two Corporations and the Consortium should explore the possibility of marketing Indian products through the established channels of some of the leading foreign companies, especially in the case of processed items. For this purpose, suitable tie-up arrangements with major overseas distributors and re-packers would be an appropriate strategy.

Common Brands: Major supplying countries market their fresh fruits and vegetables under a common brand name. "Jaffa"

oranges and "Carmel" fruits (other than oranges) and vegetables of Israel, "Chiquita" bananas of the United Fruit Company of the USA, and "Outspan" fruits and vegetables of South Africa are some of the instances. The two Corporations and the Consortium recommended earlier should explore the possibility of promoting identification of India's fruits and vegetables exports through common brand names.

Distributors' Labels: The Survey has revealed that in many of the European countries, particularly West Germany, the UK and Scandinavian countries, the most significant characteristic of food retailing relates to the sale of canned foods and vegetables under distributors' labels. It has been estimated, for instance, that over 40 per cent of South African canned foods shipped to the UK in 1966 were marketed under local buyers' labels. In West Germany, more than 25 per cent of the South African and Australian canned goods are estimated to be sold under local German labels. This is an area, which offers good prospects in the European markets. A number of importers contacted during the Survey showed interest in selling Indian items including mango products, fruit juices and canned pineapples under their own labels.

Price Systems: Prices of fresh fruits and vegetables are governed by several factors varying from country to country and commodity to commodity. For instance, the system of Reference Prices of ECM with regard to fresh produce is designed to safeguard the interests of the member countries. Banana prices, however, are generally fixed all the world over on the basis of long-term (including revolving, annual or biennial) contracts. In certain markets like Hamburg, Munich and Rotterdam, it is necessary to sell the produce through auctions and in such cases fluctuations in prices are inevitable.

SALES PROMOTION

Sales promotion constitutes an important feature of fresh and processed fruits and vegetables marketing in Europe. Major supplying countries having large stakes in the consuming markets incur sizable expenditure aimed at promotion and publicity of their products. More important media utilised by the exporting countries include advertising in trade and consumers press, television, demonstrations, prize competitions, distribution of point-of-sale material and give-aways.

World's leading suppliers are spending huge amounts on brand publicity. Advertising expenditure on publicising fresh fruits and vegetables in the UK in 1967, for instance, aggregated about \$600,000 of which \$400,000 were devoted for TV publicity

and the remainder for press publicity. Of the total TV expenditure, Israel alone spent about \$250,000 for promoting "Jaffa" oranges and grape-fruits. SOPEXA (Societe Pour l'Expansion des Ventes des Produits Agricoles et Alimentaires), a semi-government body in France, spent about \$200,000 during 1967 on press publicity and on organising "French Horticultural Weeks" in the major European cities for popularising French fruits and vegetables.

Publicity in the field of processed fruits and vegetables is equally significant. For instance, publicity expenditure of three leading overseas sellers in the UK alone has been estimated at \$2.5 million in 1967. Countries like Australia spend vast amounts of money on overseas generic publicity apart from the brand publicity carried out by individual exporters.

The above instances indicate the volume of financial support required for promoting exports of fresh fruits and vegetables in major world markets. Viewed against this background, the current annual expenditure of \$27,000 (of which 20 per cent represents generic publicity carried out by the Processed Foods Export Promotion Council) on overseas publicity for India's processed products cannot be regarded as significant. No publicity is undertaken at present for fresh fruits and vegetables. It is imperative that adequate foreign exchange is made available for effective publicity and promotion for greater exports of fruits and vegetables, both fresh and processed. In the initial stages there will be need for incurring expenditure incidental to the introduction of India's fruits and vegetables in selected Survey countries to the extent of Rs 1.5 million.

The Survey envisages an outlay of Rs 40 million over the coming five years for trial shipments, product testing and test marketing, consumer surveys, publicity and other promotional activities.

RESEARCH, EXTENSION AND DEVELOPMENT

In important supplying countries like Italy, France and Spain, much emphasis is being laid on horticultural and technological research, specifically oriented to meet the requirements of the industry. Constant efforts are being made to improve the performance of existing varieties, evolve new varieties, improve methods of cultivation and harvesting, develop efficient techniques of harvesting and processing, and bring about product development and innovation. For instance, in Italy, the "palmetta" system, originally devised for peaches has now been successfully extended to apricots and pears as a result of research carried out by Instituto Di Coltivazioni, Arborico, Bologna. Similarly, Instituto de Agronomicai Tecnologia de Alimentos in Valencia (Spain) has developed a

simple method of processing grapes for separating flavour from the juice which can be re-mixed at the time of use. The Institute is currently engaged, among other things, in assessing the possibilities of using "blanca" oranges for producing canned orange segments and in working out relative economics of freeze-drying and dehydration of vegetables. Close and effective liaison exists in these countries between the horticultural and processing industries and the research institutions, agricultural universities, etc.

There is need in India to further expand and intensify research work currently being carried out by organisations like Indian Council of Agricultural Research, Central Food Technological Research Institute and other institutions, particularly to deal with special problems that may arise in the context of building up an export-oriented horticultural industry in the country.

The Survey envisages an outlay of Rs 30 million over the next five years for assistance to research institutions for specific programmes.

TECHNICAL ASSISTANCE

The Survey considers that there is need to supplement the expertise and know-how available in the country in the field of horticultural development with the services of foreign technical experts in production, processing and manufacture of requisite machinery. In this context, India should preferably seek the assistance of the FAO for making available the necessary expertise under the Extended Programme of Technical Assistance of the UNO. Alternatively, services of horticultural technologists could be sought from major producing countries like the USA, Spain, Italy, France, Bulgaria and Yugoslavia. In addition, Indian personnel should be trained in the major supplying countries like Italy, Spain and the USA under suitable aid programmes.

PRODUCTION FINANCE

Existing financing and refinancing institutions like co-operatives, land mortgage banks and the Agricultural Re-Finance Corporation are not in a position to offer adequate financial facilities to the growers owing to various statutory and other limitations. This has been one of the major factors affecting the development of Indian horticultural industry. Leading supplying countries have, on the other hand, evolved a number of schemes under which growers can secure requisite long- and short-term finances. In France, for instance, the Government, in cooperation with SICAs, FORMA (Fonds d'Orientation et de Regularisation des Marche's Agricoles) and FMA (Fonds Marche's Agricoles) and FEOGA (Fonds Euro-

pean d'Orientalion et de Garantie Agricoles), provides financial support for developing the horticultural industry. In Switzerland, through the respective arboricultural centres, Government grants necessary production finance for reparaclling of land, uprooting of orchards that are uneconomic, and development of nurseries.

Provision of similar financial facilities to the growers in India would be necessary in the implementation of any expanded programme of horticultural development. This is an area which merits detailed investigation. It is suggested that a study group may be set up to make an intensive study of this problem.

EXPORT ASSISTANCE

In most countries, various types of specific inducements are offered to promote exports of fresh as well as processed fruits and vegetables. In major supplying countries of Europe, minimum prices are guaranteed by the respective Governments for exports of fresh fruits and vegetables. Allowing drawback of import and excise levies on tinsplate and supplying sugar at concessional prices for export purposes is almost universal. In some countries, fiscal incentives are also offered: in Singapore, for example, corporate profit tax on export earnings is limited to 4 per cent as against the rate of 40 per cent applicable to profits accruing from domestic sales. Besides, considerable institutional support is forthcoming to publicity and promotion in most countries. For instance, SOPEXA, a semi-government organisation in France, supports publicity and promotional programmes of private exporters up to a maximum extent of 80 per cent, besides carrying out substantial generic publicity for the French horticultural produce in overseas markets.

There is scarcely any special type of assistance for exports of fresh fruits and vegetables from India, which largely comprise onions at present. However, realisation of the substantial potential outlined by the Survey in respect of different horticultural crops will entail need of specific types of assistance, which should be considered on the basis of the merits of the situation. In particular, it will be necessary to offer, in the initial stages, adequate subsidy on air freight to tap the off-seasonal advantages offered by the European markets. Besides, adequate foreign exchange needs to be released to facilitate effective publicity and promotion; this is an essential requirement for increased exports of processed as well as fresh fruits and vegetables.

Viewed from a strictly narrow angle, the export assistance offered in respect of cans and sugar is more or less adequate as compensation for the differential between internal and international

prices. However, judging from the need of enabling the processing industry to develop a sound domestic base to sustain the export effort, additional assistance from the Government is called for. In particular, there appears to be a case for enlarging the scope of the cash assistance, which is basically meant to neutralise the differential between the controlled price and international price of sugar. It is suggested that as against the present rate of 3-12½ per cent, cash assistance should be offered at the rate of 10-20 per cent of the f.o.b. value, with a suitable sliding scale to provide for adequate incentive at different slabs of exports.

TARIFF COMMISSION ENQUIRY

The substantial rise in prices of cans (about 80 per cent) and sugar (about 200 per cent) since 1963, when the Tariff Commission held its last enquiry on the processed fruits and vegetables industry, has led to an exorbitant rise in domestic prices of the products, resulting in retarded growth of the domestic demand. The need for enabling the industry to develop a sound domestic base to sustain the export effort cannot be overemphasised. It is, therefore, suggested that the Tariff Commission should be requested to hold a comprehensive enquiry into the entire structure of the processed fruits and vegetables industry, with particular reference to the need for offering suitable assistance to the industry in respect of major cost elements like cans and sugar.

PRIORITIES

The strategy for development should necessarily be based on a careful determination of priorities and considerations of selectivity. Onions, bananas, mangoes, lychees, grapes, strawberries, French beans, capsicums, aubergines, mango products, lychees wholes, canned vegetables like peas, beans and mixed vegetables, and pickles and *chutneys* have been identified by the Survey as items having the maximum potential in the short term. From the medium-term point of view, prospects offered by volume items like citrus fruits, white fleshed onions, potatoes, canned peaches, pineapples, apricots, mandarin orange segments and juices (particularly citrus concentrates) and tomato products are substantial. Besides, efforts should be made to explore possibilities of commercial production of crops like avocados, cultured mushrooms, asparagus and salad type vegetables, which offer good export prospects.

FEASIBILITY STUDIES

Feasibility studies are expected to determine the scope of economic production and processing of individual products, identify

the areas where they can be grown taking into account the soil and climatic conditions, and establish clearly the potential for development and export of each item in fresh or processed form of an internationally competitive level. It is suggested that a blue-print for the development of fruits and vegetables industry in the country should be drawn up on the basis of suggested studies.*

The Survey has estimated an expenditure of Rs 5 million for conducting feasibility studies on potential export items including tomatoes, citrus, deciduous fruits and pineapples.

EXPORT TARGETS

Considering the export prospects offered by different markets (surveyed and unsurveyed) and keeping in view the resource base available in the country and on the basis of the measures suggested above, it is estimated that exports of fresh and processed fruits and vegetables can be stepped up from 116,121 tonnes (Rs 67 million) in 1967-68 to 160,000 tonnes (Rs 110 million) in 1970-71 and 450,000 tonnes (Rs 500 million) by 1975-76.

Exports of fresh fruits and vegetables are expected to go up from 110,000 tonnes (Rs 49 million) in 1967-68 to the level of 145,000 tonnes (Rs 72.5 million) by 1970-71 and 310,000 tonnes (Rs 205 million) by 1975-76. Substantial rise is envisaged in exports of bananas, mangoes and citrus fruits. These three would, in fact, account for 80 per cent of the total export earnings from all fruits in 1975-76. In view of the projected increase in exports, the share of onions in the total value of exports of fresh fruits and vegetables, which is currently as high as 86 per cent, would be no more than 30 per cent in 1975-76.

While the present exports of processed items are largely confined to mango products comprising mainly juice, nectar and pickles and *chutneys*, a sizable export volume of other items like pineapple slices, mandarin orange segments, deciduous fruits and citrus and tomato concentrates is envisaged. As a result, exports of processed fruits and vegetables are expected to register a significant rise from about 6,200 tonnes (Rs 18 million) in 1967-68 to 15,000 tonnes (Rs 37.5 million) by 1970-71 and 140,000 tonnes (Rs 295 million) by 1975-76.

INVESTMENT

It is estimated that realisation of the above targets would entail an investment of about Rs 400 million spread over the next

*Some of the factors to be taken into account in undertaking feasibility studies are dealt with in the Report.

five years. The envisaged investment would cover horticultural and technological research, feasibility studies, establishment of modern packing houses and processing units, modernisation of existing machinery and equipment, securing services of foreign technical experts, development of ancillary industries and sales promotion.

FOREIGN INVESTMENT

Taking into account the scarcity of local finance and limited resources of foreign exchange available, the possibility and mode of inviting foreign capital should be fully examined. The foreign capital would bring with it the latest machinery and know-how for the development of processing industry in the country. The instances offered by Philippines (American investment), Ivory Coast and Martinique (French investment) and Kenya and Ethiopia (German investment) are relevant in this context. Industry in these countries has been developed primarily to service respective domestic markets of the principals whose consumption potential is very high. The Government should consider offering to prospective foreign investors specific inducements such as removal of inhibitions relating to or liberal interpretation of the present Land Ceiling Act, and simplification of procedures of, and availability of facilities for, repatriation of profits.

IMPLEMENTATION OF RECOMMENDATIONS

It is suggested that the Planning Commission should set up a high level Committee consisting of the representatives of the Union Ministries of Food & Agriculture, Industry, Commerce and Finance, with the association of selected horticultural experts from the States, for considering the recommendations embodied in this Report with a view to determining the priorities and effecting implementation.

The measures suggested in the Report essentially constitute medium-term programme when viewed against the vast scope that exists in India for horticultural development and exports. It will be appropriate that for taking a long look ahead over the ten-year period, covering our Fifth and Sixth Five-Year Plans, a Horticultural Production and Exports Commission should be constituted for drawing up a bold and imaginative programme of development in the sector of fresh and processed fruits and vegetables.

BANGALORE SEMINAR

The inadequacy of attention at present paid to and the need of effectively tackling the various problems of expansion of the

production base and exploitation of the enormous potential of the fresh and processed fruits and vegetables of India were highlighted in the two-day Seminar which concluded its deliberations on August 24 at Bangalore. The Seminar was attended by about 70 representatives of the processing industry, Central and State Governments, organisations of cooperatives, research institutions, etc. The Seminar was inaugurated by Shri Veerendra Patil, Chief Minister of Mysore State, and was held under the Chairmanship of Shri H.D. Shourie, Director General, Indian Institute of Foreign Trade. Two Groups constituted by the Seminar deliberated upon the various problems of fresh and processed fruits and vegetables. Recommendations emanating from the two Groups were finalised in the concluding session of the Seminar on August 24.

RECOMMENDATIONS

The Seminar examined in detail the various conclusions and recommendations contained in the comprehensive Survey conducted by the Indian Institute of Foreign Trade on an assignment from USAID for examining the export potential of fresh and processed fruits and vegetables. The Survey had covered the entire range of important fruits and vegetables of India and had investigated the problems of production and exports in relation to 22 countries of Europe, West Asia and South-East Asia.

Representatives of the industry and trade endorsed the projections and estimates made in the Survey about the scope of expansion of exports of these commodities to the level of Rs 50 crores per annum by 1975-76 from the present level of nearly about Rs 2.5 crores, excluding the exports of onions of the value of about Rs 4.2 crores. The estimates of investment required in the various sectors for expansion of the production base and fuller exploitation of the export potential, figured at Rs 40 crores in the Survey of the Institute, were found to practically synchronise with the estimates framed by the Ministry of Food and Agriculture for the development of this industry. The Seminar endorsed the effort required to be made by the Central and State Governments for making available the resources for the purpose of requisite investment.

Effective implementation of the recommendations of the Survey, for achieving the targets envisaged in the Report, was emphasised by the Seminar. For this purpose, the Seminar endorsed the suggestion that a high-level Committee should be constituted under the auspices of the Planning Commission, representing the concerned Ministries of the Central Government and the interests of the industry and State Governments, with a view to focussing attention on various areas for bringing about early implementation of the recommendations.

Considering the vast potential of the production of fruits and vegetables in the country, which possesses the diversity of climates and soils, etc., the Seminar recommended that as a long-term measure the Government of India should set up a Horticultural Production and Exports Commission, which should prepare a bold and imaginative plan for implementation during the Fifth and Sixth Plan periods.

Considerable attention was paid by the Seminar to the recommendations relating to the development of appropriate organisations for the enlargement of production and exports of bananas and fruits other than bananas. The suggestions for the development of these organisations were supported by the Seminar, but it was emphasised that in the interim period the existing organisations should be strengthened with a view to making them more effective in their areas of operation. The hope was expressed that the existing Banana and Fruit Development Corporation, comprising the States of South India, would enlarge the scope of its functioning for expanding the production of various fruits with the active participation of the Central Government as well as the concerned State Governments. It was envisaged that the State Trading Corporation would continue to expand its operations for exploration of the markets for India's fruits and vegetables.

For the expansion of production base of the fruits and vegetables it was felt that the operation of State legislation relating to ceilings on land holdings would need to be reviewed so that they do not constitute any impediment to the expansion of production. The Seminar recommended that a high-level conference should be organised under the auspices of the Planning Commission in which State Departments of Agriculture and Horticulture and the Ministry of Food and Agriculture would take cognizance of the present position and determine the requirements.

Great concern was expressed by the Seminar in regard to transport costs, which significantly add to the f.o.b. price of India's fruits and vegetables and made them uncompetitive in the world markets. It was suggested that the problems relating to railway freight and the requirements of special types of wagons for the movement of the fresh fruits and vegetables should be examined in detail by a Specialist Group constituted by the Railway Ministry. It was also suggested that the problems relating to the air-freighting of fruits and vegetables should be studied in detail in order to find satisfactory solutions to the problem of heavy freight rates which disables the transport of these commodities by air.

The representatives of processing industry expressed their great concern in relation particularly to the requirements of sugar

and the special varieties of tinsplate for export products. It was emphasised that the economies of development of the processing industry necessitated the supply of sugar at controlled rates to the processing industry in order to facilitate its expansion for reducing the production costs. For the export production, the necessity of supplying sugar at international prices, and for devising ways and means for supplying the required varieties of tinsplate at competitive rates, was stressed by the industry.

It was felt by the Seminar that the availability of the raw materials in the shape of fresh fruits and vegetables for the processing industry, at prices which would be competitive with the prices at which they were available to the competitors in the other countries, was of fundamental importance from the point of view of developing competitive capacity in the Indian industry. Taking account of the prevailing high prices of these raw materials, the Seminar felt that it would be absolutely essential to provide appropriate export assistance in order to bridge the price gap. It was desired that the Processed Foods Export Promotion Council should make intensive studies of the cost differential and take up this matter with the Government of India for determination of the appropriate quantum of export assistance.

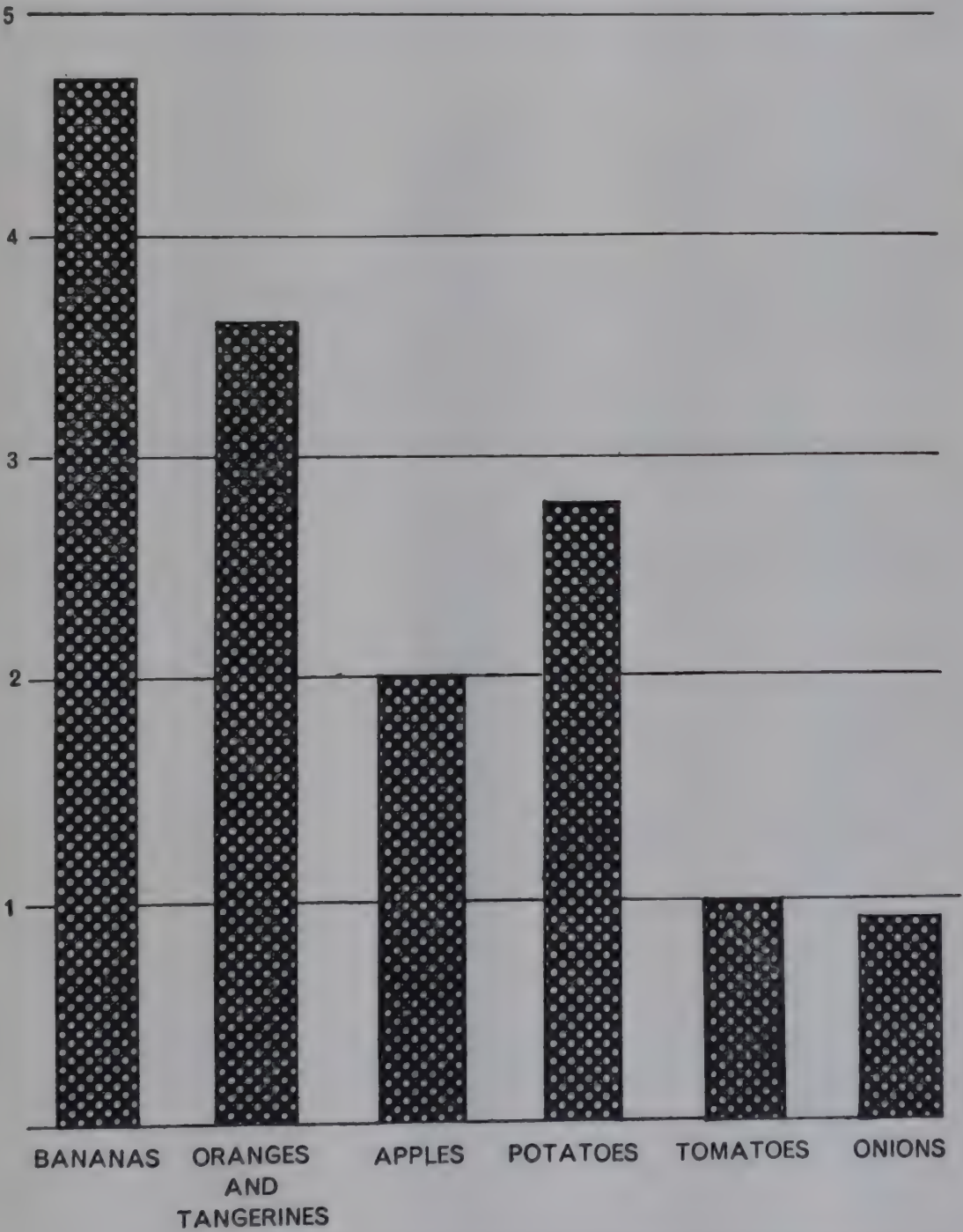
Problems of individual items of fruits and vegetables were examined in detail by the Seminar. The recommendations featuring in the Survey Report of the Institute were examined and supported by the Seminar in relation to these items. Emphasis was placed on the determination of priorities among various items in order to ensure full exploitation of their production and export potential.

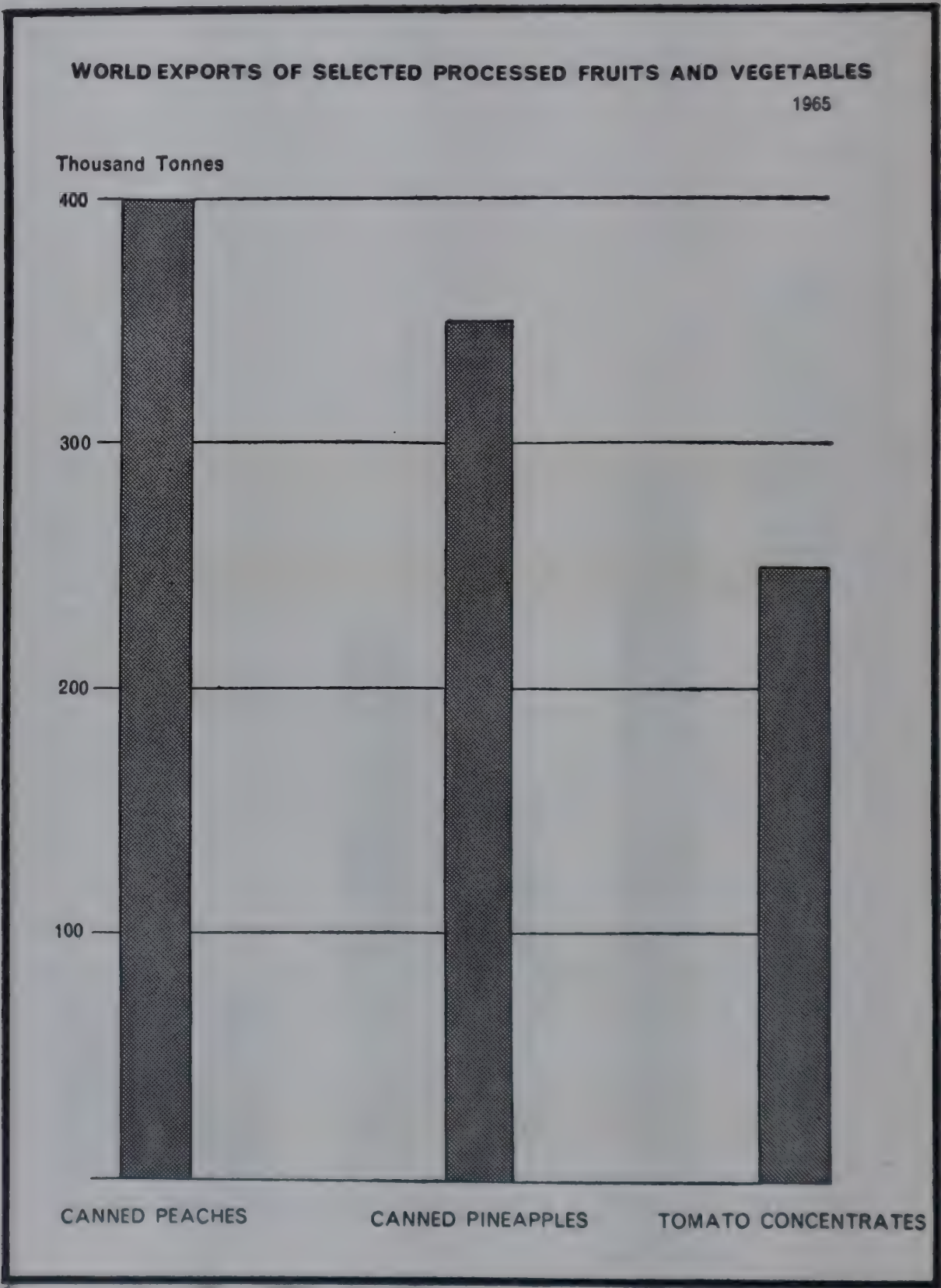
The Seminar expressed the positive expectation that with the implementation of various recommendations made by the Survey Report of the Indian Institute of Foreign Trade, supplemented by the recommendations emanating from the Seminar deliberations, could lead to the expansion of production for reaching the export target of Rs 50 crores by 1975-76.

WORLD EXPORTS OF FRESH FRUITS AND VEGETABLES

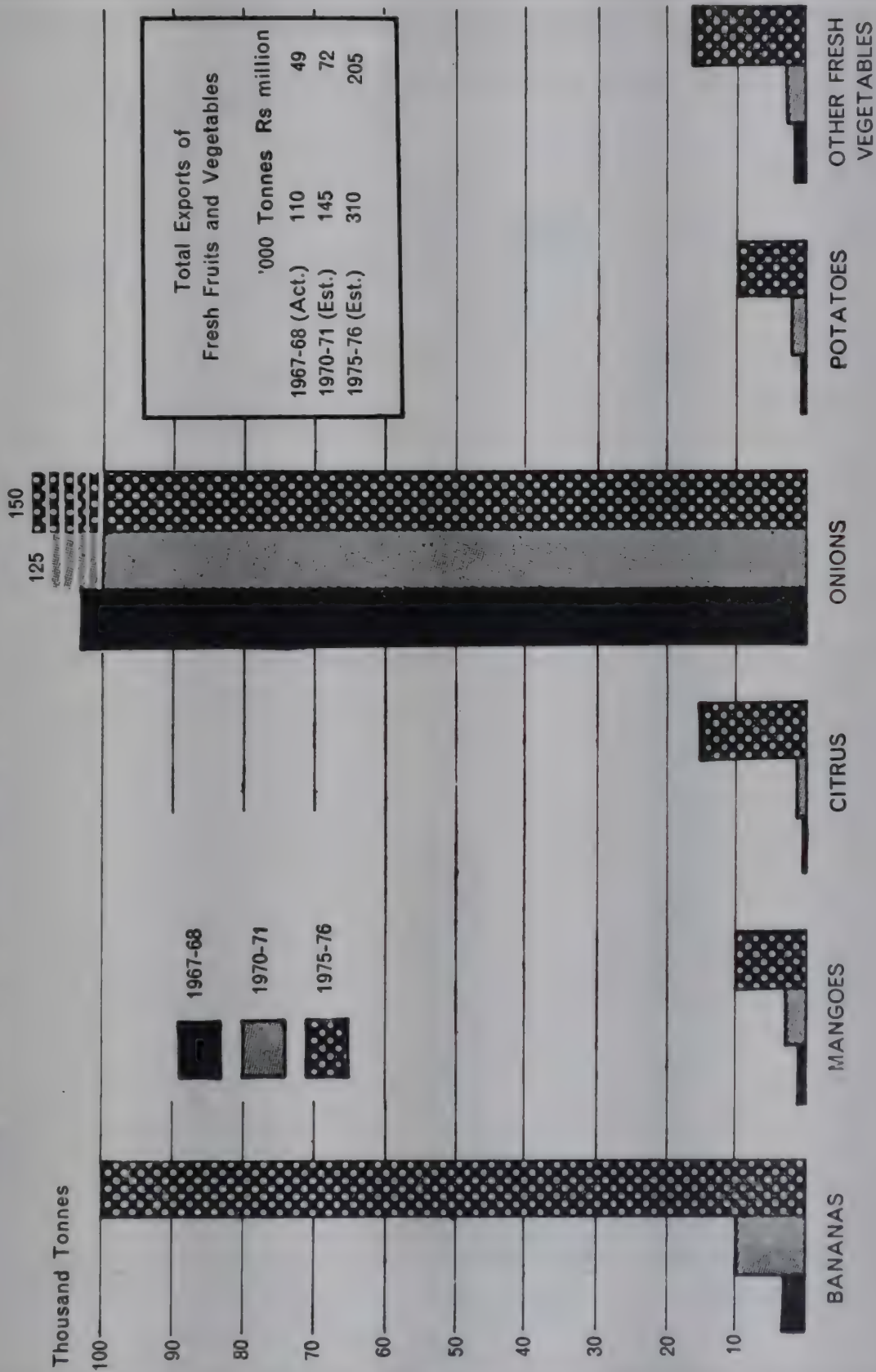
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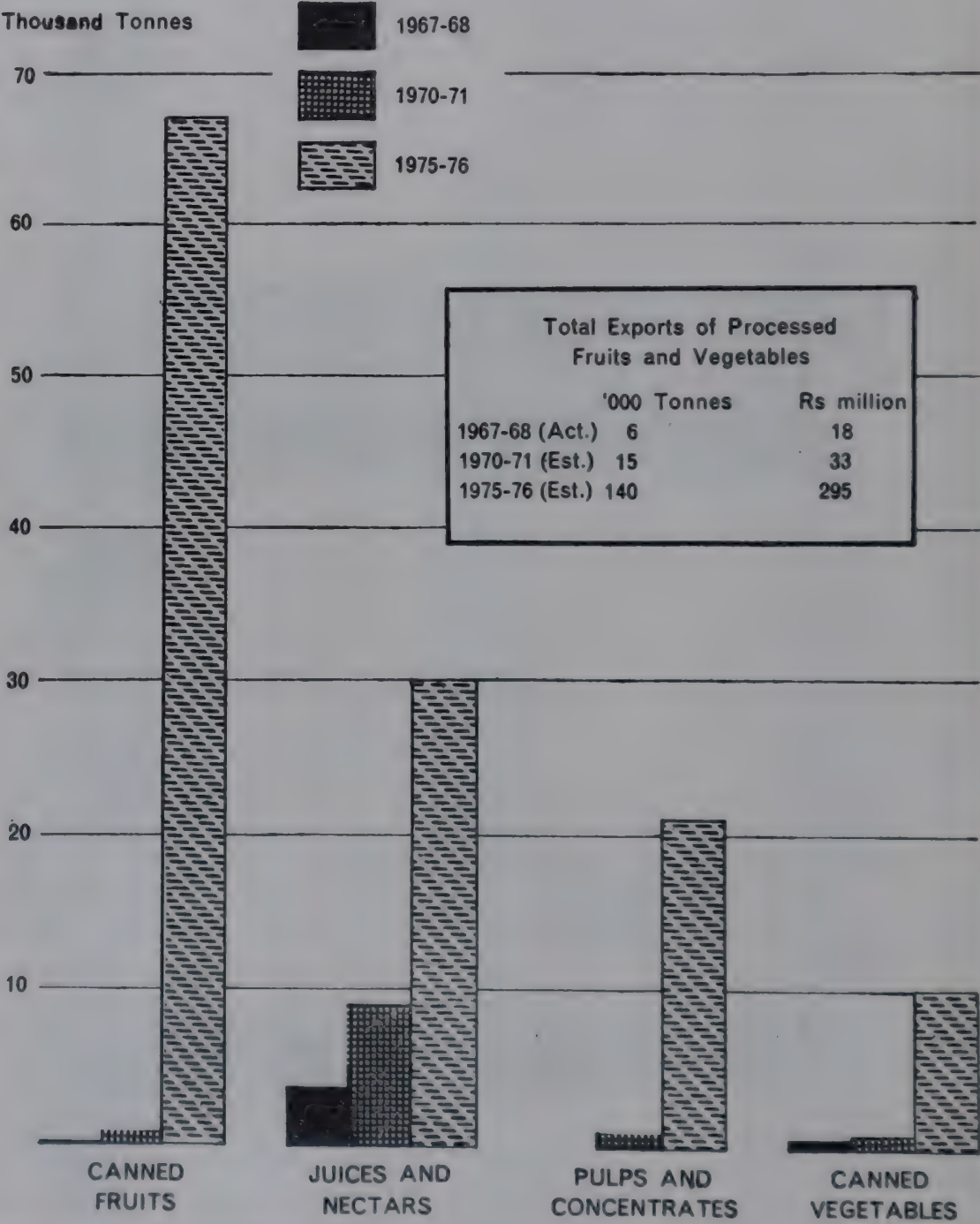


INDIA'S EXPORTS OF FRESH FRUITS AND VEGETABLES —PRESENT AND POTENTIAL



INDIA'S EXPORTS OF PROCESSED FRUITS AND VEGETABLES
—PRESENT AND POTENTIAL

Thousand Tonnes



BOOK REVIEWS

TECHNIQUES OF INTERNATIONAL MARKETING

By Y. IRUDAYAM

Asia Publishing House, Calicut Street, Ballard Estate, Bombay-1;
Pp. 163; Rs 22.00.

In recent years, the science of marketing has made a tremendous progress. In many developed countries, mass production of merchandise has been facilitated by means of assembly line operation, which, in turn, has underscored the importance of marketing. Gone are the days when the major functions of an enterprise were confined only to the production of goods without bothering about its outlets. These days the activities of manufacturing concerns embrace all the functions from consumer-oriented production to after-sale service. In other words, the problem of modern commercial firms is no longer only that of production; it is equally one of studying the needs, tastes, preferences and buying habits of the consumer so as to ensure that what is produced is sold. The consumer's sovereignty has thus swung the balance of power away from the production personnel to the marketing executive. This change in the concept and approach of marketing is sweeping across Europe and other advanced countries and any success in tackling these growing markets will largely depend on the understanding of this change.

International marketing has become a specialised and complicated job. New and sophisticated tools are being applied to marketing and a lot of money is being invested in research in the marketing mix. Test marketing, pre-sale and after-sale service, sale on deferred payment basis, quick deliveries, sophisticated packaging, new designs and many other techniques are being increasingly used by marketers of today. With the sophisticated product, the techniques of marketing are also becoming sophisticated. These techniques have to be matched by our exporters if we have to enter the world markets firmly. It is not enough that our merchandise is competitive in terms of price and quality. To be successful, we have to match our competitors in terms of marketing techniques also. The developing countries, which have industrialised their economies under heavy protection, have to learn the entire range of marketing skills. Any contribution in this direction is indeed welcome.

Y. Irudayam's book, *Techniques of International Marketing*, contains 16 chapters and eight appendices. Except the first three chapters, the text-matter

deals with the procedures of export rather than techniques of marketing. In the entire book, the emphasis has been on the mechanics of export, and important areas of marketing like pricing, packaging, market research, distribution channels, export finance, commercial intelligence, test marketing and impulse buying have been left uncovered or treated scantily. Even in procedures, the information given is generally out-of-date. The list of documents given in the book is incomplete and many of the important documents are not included. For example, there is no mention of export documents such as different types of consular invoices, invoices of contract abstract, phyto sanitary certificate, source certificate, the documents to be legalised and the amount of fee to be paid. The analysis in the first three chapters is weak. After going through the book, one wonders whether one has learnt any techniques of marketing.

These limitations notwithstanding, the author deserves to be congratulated on this effort. There are very few publications on techniques of international marketing written by Indian authors. The information contained in the appendices is useful and handy to the exporters. We wish our operating managers took some initiative and spared some time for writing their experiences on marketing. Such efforts will be more beneficial to the Indian exporters than the texts written by the authors of developed countries whose problems of marketing are entirely of a different character.

—M.L. Garg

LINER SHIPPING IN INDIA'S OVERSEAS TRADE

By T.K. SARANGAN

United Nations, New York; 1967; Pp. 191; US \$2.50.

"Liner shipping," which has been histriocally a subject of deep investigation by official commissions, offers a fascinating field of study for research. The "conference system" came into existence during the latter half of the 19th century in India's overseas trade and soon got itself established on major trade routes of the world. The problems posed by the system became the subject-matter of a study in the UK by the Royal Commission on Shipping Rings, which reported in 1904 followed by the investigation of the Alexander Committee appointed by the Government of the United States of America. More recently, its functions and operations came under a close scrutiny in the USA by the Celler Committee. Like the exploration of the mysterious surface of the moon, the process of investigation and study of the conference system would continue till a definite judgment could be established and a suitable alternative found. This publication, brought out at the time of UNCTAD-II held at New Delhi

in February 1968, is one of the series of studies initiated by the UNCTAD Secretariat in the field of shipping.

Part I of the study deals with the organisation and functions of shipping conferences on India's major trade routes, namely, the India-UK/Continent, India-USA, India/Pakistan-Middle East and India-USSR/Romania/Bulgaria. The conference practices in the forms of tying arrangements, viz., the deferred rebates and dual rates systems, have been considered in Chapter V. The impact and incidence of liner freight rates on principal traditional items along with one non-traditional item of engineering goods have been examined in Part II. High, anomalous and discriminatory freight rates are explained in Chapter IX, while stressing the need for promotional and developmental rates. Part III, which is concerned with consultation and negotiation machinery, gives information about the formation of shippers' and shipowners' associations. Besides, the functions of the Freight Investigation Bureau, Maritime Freight Commission, National Shipping Board, Shipping Coordination Committee, etc., which constitute the Government machinery, have been outlined. Port matters have come up for some consideration in Part IV and a summary account of the entire study has been given in the final part. The annexes to the study give a good deal of useful information about shipping lines operating in India's overseas trade and the information on freight rates from competing sources of supply with regard to a number of export items is of particular interest to the readers.

As a document designed to give a descriptive account of liner shipping in India's overseas trade and the problems arising on account of the methods of its operations, the study is quite educative for lay readers. The author, on account of his official position in the Directorate General of Shipping wherein he has had the opportunity of direct involvement with the subject-matter of the study, has been able to marshal considerable information without much difficulty. However, an initiated mind feels deprived of more important information on many vital issues and crucial aspects of liner shipping in India's overseas trade about which the author ought to know better. Perhaps, the very position, which facilitated the task of collecting information and data, possibly inhibited him in exercising his legitimate freedom as an author. For instance, one would have liked to have a more detailed account of the circumstances under which Indian lines entered the conferences and, more particularly, the dramatic entry of the Shipping Corporation of India. Moreover, a fuller account of the Karmahom freight rise controversy that arose in 1961 would have been highly educative from many points of view. At that time, the Government of India had almost made up its mind to break the monopoly hold of the conferences once and for all, as could be seen from the public utterances of the then Minister of Shipping. Unfortunately, for lack of support from shippers and lack of confidence on the

part of Indian lines, the attempt ended in a failure. Had it succeeded, it would have materially altered the face of liner shipping in India's trade.

Such matters offer invaluable lessons to the developing maritime countries. Besides, the examination of the motivations and methods of operating joint shipping services in our trade with socialist countries would have been more enlightening, particularly, when it is noted that such arrangements appear *prima facie* inconsistent with the socialist ideology. It is remarkable that despite a sweeping wind of socialism blowing strongly in the post-War era, not only the conference ships are standing firm but are making it veer round them. But then the author seems to have left out all such issues, not inadvertently, for those who are more fortunately placed, and for that they should feel grateful to him.

—H.B. Desai

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Editor

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FOREIGN TRADE REVIEW

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NO. 4

PROSPECTS OF EXPORTS IN THE FOURTH PLAN

By Pitambar Pant & K.S. Mehra

I. CRUCIAL ROLE OF EXPORTS

THERE is a large deficit in India's foreign trade which is being met currently through foreign aid. Imports were nearly \$2,800¹ million and exports only \$1,600 million in 1967-68, showing a deficit of \$1,200 million on foreign trade account, which represents 75 per cent of the export earnings. There is in addition a growing debt burden to be met (interest and repayment charges on debt incurred), which added up to \$500 million in 1967-68 and is expected to grow in future. Thus our obligations totalling \$3,300 million are more than twice our export earnings. Since there is practically no margin on the invisibles side, there is a large gap in our balance of payments, which is a measure of our current abnormal dependence on external assistance.

One of the important objectives of development planning in India must be to achieve a satisfactory rate of economic growth accompanied with rapid progress towards self-reliance as reflected in a viable balance of payments. The structural changes required to correct the imbalance on foreign account must be carried out over a period of time, as part of a sustained long-term strategy of import substitution and expansion of exports. Normally the rate

¹Adjustments have been made in the trade figures to account for incomplete reporting, mainly for certain imports on government account.

of growth of output, the propensity to import and the growth of exports must be mutually consistent. While foreign aid has an important part to play in the transitional stage, its role must progressively be curtailed.

A very large part of India's imports during the last two years, nearly 25 per cent, was on account of foodgrains. This was necessitated by severe drought conditions in 1965-66 and 1966-67 which affected agricultural production very adversely in two successive years, when foodgrains production was nearly 20 million tonnes less than anticipated on the basis of long-term trend. The lost ground was fully recovered in 1967-68 when foodgrains production was up by 20 million tonnes, registering a record high production of 96 million tonnes. The prospects of continued agricultural improvement have improved and it is generally expected that food-grain imports may not normally be required after 1970-71. This will make large reduction in imports possible. At the same time, as the economy develops, there will be need to increase imports, which will keep rising in the aggregate despite a strong and successful import substitution policy. For a sustained rate of growth of the Indian economy at 6 per cent per year, it is estimated that non-foodgrain imports will rise from about \$2,150 million in 1968-69 to \$2,600 (± 50) million in 1973-74 and \$2,800 (± 50) million in 1975-76. If exports, estimated at about \$1,767 million in 1968-69, have to match non-foodgrain imports in 1973-74 (assuming there will be no foodgrain imports then), there should be an increase in exports averaging \$170 million per year over the Fourth Plan period. If the realisation of this objective of achieving trade balance is to be deferred till 1975-76, the average annual growth of exports will still have to be about \$150 million. Later there will have to be a surplus of exports over imports to enable at least a part of debt obligations to be met. Aiming at self-reliance without clearly recognising and deliberately seeking to solve this problem will be an exercise in futility.

This article attempts a quantitative assessment of the possibilities of exports from India during the Fourth Plan period (1969-70 to 1973-74), and provides certain tentative estimates for 1978-79. A brief review of the export target for the original Fourth Plan (1966-67 to 1970-71), as indicated in the Draft Outline (September 1966), and actual performance of exports in 1966-67 and 1967-68 are indicated in Section II. The outlook for exports in 1968-69 is discussed briefly in Section III. In Section IV, preliminary estimates of exports for the period, 1969-70 to 1973-74, and for 1978-79, as worked out in the Perspective Planning Division (PPD) of Planning Commission, have been discussed, and the projections of exports for the Fourth Plan (1969-70 to 1973-74) for selected

major commodities have also been indicated. Export targets for 1978-79 have been worked out on similar considerations and are shown in Table IV. The concluding part, namely, Section V, touches upon policy measures and follow-up action needed for promoting exports during the Fourth Plan period. The appendix on p. 397 indicates changes in the direction of India's exports during the period, 1951-52 to 1968-69.

Estimates presented in this article are based on studies made in the PPD and elsewhere. The targets of exports are not mere projections which may be expected to be realised without very deliberate planning and promotion. Nor are these figures conjured up by imagination without careful concern for practical possibilities both on the demand and supply side. It is difficult to be dogmatic about these or other similar targets. The studies on which these are based must be constantly reviewed and improved upon. The present article is intended to orient thinking on exports in right order of magnitudes and in concrete terms so that determined action can follow purposeful analysis.

II. PERFORMANCE OF EXPORTS IN 1966-67 AND 1967-68

The Draft Outline of the "Fourth Plan" (September 1966) indicated an export target of Rs 8,030 crores in post-devaluation rupees (\$10.7 billion) for the "Fourth Plan" period (1966-67 to 1970-71), exports rising from the actual level of Rs 805 crores, pre-devaluation, (equivalent to \$1,692 million) in 1965-66 to Rs 1,930 crores, post-devaluation, (\$2,570 million) in 1970-71. This meant an increase of 51 per cent over the Fourth Plan period or an annual growth rate of 8.5 per cent.

As against the projected level of Rs 1,300 crores, post-devaluation, (\$1,734 million) in 1966-67, actual exports turned out to be much lower at Rs 1,156 crores (\$1,542 million). The export target for 1966-67 was only 2 per cent higher than that of the previous year, but exports actually realised were 10 per cent less. Compared to the export target, the realised exports were short by 12 per cent. The decline in exports was due to a number of factors operating in India and the markets abroad. The main factors responsible for this decline were:

- (1) Continuing drought in 1965-66 and 1966-67, seriously affecting the supply side of agricultural and agriculture-based exports;
- (2) temporary dislocation in export trade following devaluation of the rupee in June 1966, arising out of the need for

re-negotiating contracts, etc., in regard to East European countries and the suspension of existing export promotion schemes; and

- (3) reduction of foreign demand for certain items such as cotton textiles and tea, and a reduction in unit prices of many commodities entering India's export trade such as tea, sugar, oilcakes, tobacco, pepper and iron ore.

Tables I and II bring out the main features of the exports in 1965-66 and 1966-67, showing data separately for selected commodities which registered decline (Table I on p. 375) and increase (Table II on p. 376) in exports in 1966-67 compared to the previous year and in respect of the former giving an idea of the fall in earnings attributable to reduction in quantity (col. 11) and to fall in unit value (col. 10).

Thus analysed, certain promising aspects of exports are revealed, which are likely to be lost sight of in discussion of global aggregates. Table II shows an increase of 23 per cent in one year in exports of five items, which have a growing importance in India's future exports. These are: leather, iron and steel, iron ore, fish and fish preparations, and cashew kernels. The increase was \$55 million. The rate of growth was exceptionally high for iron and steel (81 per cent), fish and fish preparations (64 per cent), and leather (undressed) (40 per cent). Although in 1966-67 these three items contributed only 9 per cent of all export earnings, their weight in future exports must rise very fast.

If exports had been maintained quantitywise at the same level in 1966-67 as in the previous year in respect of the 12 items of Table I, there would have been an increase of \$136 million in export earnings despite loss due to decline in unit values amounting to \$27 million. But drought conditions reduced supplies of agriculture-based commodities for export and a large potential for adding foreign exchange earnings was lost.

In 1967-68, exports started picking up. There was an increase of \$56 million as compared to 1966-67. Exports of a number of commodities showed substantial increase during the year. These were: tea, coffee, tobacco (unmanufactured), raw cotton, cotton piece-goods (mill-made), iron ore, engineering goods, and iron and steel. This reflected an element of recovery in the economy both in the production of commercial crops and increased industrial activity in the country.

An encouraging feature of the export performance in 1967-68 was that considerable advance was made in the exports of non-traditional items. Exports of iron and steel increased from \$31.5 million in 1966-67 to \$69.3 million in 1967-68. Exports of

TABLE I
EXPORTS OF SELECTED COMMODITIES, 1965-66 AND 1966-67, REGISTERING DECLINE IN 1966-67
(Value in million \$)

Sl. no.	Commodity	Unit	Price per tonne \$		1965-66		1966-67		Difference [(1966-67) — (1965-66)]		
			1965-66	1966-67	Qty.	Val.	Qty.	Val.	Total (col. 8 — col. 6)	Due to price change	Due to quantity change
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1.	Jute manufactures	Thou. tonnes	426.9	451.9	900	384.2	736	332.6	(—)51.6	(+)18.4	(—)70.0
2.	Tea	Thou. tonnes	1,221.9	1,109.2	197.4	241.2	190.4	211.2	(—)30.0	(—)21.4	(—) 8.6
3.	Cotton fabrics, mill-made	Mill. metres	192.2	186.7*	512.5	98.5	402.2	75.1	(—)23.4	(—) 2.2	(—)21.2
4.	Cotton fabrics, handloom	Mill. metres	435.6*	283.2*	40.4	17.6	35.3	10.0	(—) 7.6	(—) 5.4	(—) 2.2
5.	Tobacco, unmanufactured	Thou. tonnes	728.1	770.0	57	41.5	37.4	28.8	(—)12.7	(+) 1.6	(—)14.3
6.	Raw cotton	Thou. tonnes	566.7	474.5	36	20.4	33.3	15.8	(—) 4.6	(—) 3.1	(—) 1.5
7.	Coffee	Thou. tonnes	1,030.2	829.5	26.5	27.3	25.8	21.4	(—) 5.9	(—) 5.2	(—) 0.7
8.	Vegetable oils	Thou. tonnes	355.4	279.4	24.2	8.6	13.6	3.8	(—) 4.8	(—) 1.0	(—) 3.8
9.	Oilcakes	Thou. tonnes	87.7	82.0	829	72.7	821.6	67.4	(—) 5.3	(—) 4.7	(—) 0.6
10.	Spices	Thou. tonnes	781.0	754.8	62.1	48.5	52.2	39.4	(—) 9.1	(—) 1.4	(—) 7.7
11.	Manganese ore	Thou. tonnes	17.1	16.1	1,352	23.1	1,186.2	19.1	(—) 4.0	(—) 1.2	(—) 2.8
12.	Raw wool	Thou. tonnes	1,234.2	1,034.1	11.1	13.7	8.8	9.1	(—) 4.6	(—) 1.8	(—) 2.8
	TOTAL					997.3		833.7	(—)163.6	(—)27.4	(—)136.2

*Price per thousand metres.

TABLE II
EXPORTS OF SELECTED COMMODITIES, 1965-66 AND 1966-67,
REGISTERING INCREASE IN 1966-67

(In million \$)

<i>Sl. no.</i>	<i>Commodity</i>	<i>1965-66</i>	<i>1966-67</i>	<i>Increase (1966-67 over 1965-66)</i>	<i>Increase (per cent)</i>	<i>Per cent of total increase</i>
(0)	(1)	(2)	(3)	(4)	(5)	(6)
1.	Leather, undressed	58.9	82.3	23.4	40	42
2.	Iron and steel	17.5	31.6	14.1	81	26
3.	Fish and fish preparations	14.3	23.4	9.1	64	17
4.	Iron ore	88.4	93.6	5.2	6	9
5.	Cashew kernels	57.5	60.7	3.2	6	6
	TOTAL	236.6	291.6	55.0	23	100

engineering goods increased from \$30.6 million in 1966-67 to \$43.3 million in 1967-68. A wide range of goods were exported which include transmission line towers, aluminium conductors, cables and wires and other electrical equipment, railway materials, steel pipes and tubes, and castings.

This improvement in exports was as much a result of increase in the production of exportable goods as of a number of measures which were adopted following the devaluation of the rupee in June 1966. These measures were further intensified and supplemented in 1967-68. Emphasis was laid on export-oriented industries and on the need for cost reduction and diversification of products. Besides modifying the various export promotion measures taken during the preceding year after the devaluation of the rupee in June 1966, a number of fiscal and other measures were announced in 1967-68, mainly with a view to increasing the marketing competence of export products, particularly the new ones. The import liberalisation policy followed after the devaluation in respect of 59 priority industries was continued. The licensing procedure was further simplified so as to enable the priority industries to obtain import licences as and when required.

The export duties on a number of items were reduced with a view to increasing the competitiveness of Indian goods. The main duty reductions were effected partly to offset the adjustments of exchange rates made by India's important competitors in the foreign

markets following the devaluation of the sterling. Export duties on jute manufactures, tea and coir yarn were reduced while those on leather were abolished. The rates of cash assistance were enhanced on a number of selected non-traditional products with a substantial export potential. A new feature of the cash assistance scheme is the linking of assistance to export performance. Thus a strong base for increasing exports in subsequent years was laid in 1967-68.

III. OUTLOOK FOR 1968-69

In 1968-69, exports are expected to show a substantial increase due to three main factors: (1) good out-turn of commercial crops in 1967-68 and similar anticipation in 1968-69, (2) higher availability of industrial goods, and (3) adoption of a number of policy measures during the year 1967-68 and during the current year 1968-69 to improve incentives for exports and for the marketability of export products.

Monthwise exports for the seven months, April to October 1968, amount to \$1,062 million. This compares favourably to the earnings of \$924 million for the corresponding period in 1967-68. Table III on p. 378 shows data in respect of monthly trends in India's exports for the years, 1964-65 to 1967-68, and 1968-69 (April-October). For each of the four years, the first row gives figures of exports monthwise and the second row represents the cumulated total of exports up to the end of the particular month. In the third row, this figure of cumulated exports is shown as per cent of total export earnings for the whole year. These percentages appear fairly stable and provide a reasonable basis for making short-term projections.

To arrive at a reasonable estimate of export earnings during the whole year, three approaches have been tried: (1) On the basis of the average monthly export earnings during the last four years (1964-65 to 1967-68) for the five-month period, November to March, the average works out to \$141 million per month and \$704 million for the five months. Adding this to the figure of cumulated export earnings up to October, an estimate of total export earnings for 1968-69 can be put at \$1,766 million, which may be regarded as a minimum estimate. (2) Projections for the whole year are made on the basis of the average ratio of the first seven months' exports to the exports for the whole year, as observed during the last four years. This percentage has averaged 57, with a slight upward trend observed during the last two years. On this basis, the total exports for the whole year would work out to \$1,860-1,800 million. (3) An effort has been made to make an estimate for the whole year 1968-69 on the basis of commoditywise trends in exports during the five

TABLE III
INDIA'S EXPORTS MONTHLY, AS WELL AS CUMULATED UP TO MONTH END
1964-65, 1965-66, 1966-67, 1967-68 AND 1968-69 (APRIL-OCTOBER)

	(In million \$)													
	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	Total	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
1964-65														
Exports for the month	142.2	129.2	145.3	135.1	137.2	153.0	138.4	157.9	151.8	132.9	130.1	161.3	1,714.4	
Cumulative up to the month end	142.2	271.4	416.7	551.8	689.0	842.0	980.4	1,138.3	1,290.1	1,423.0	1,553.1	1,714.4	1,714.4	
As per cent to total	8.3	15.8	24.3	32.2	40.2	49.1	57.2	66.4	75.2	83.0	90.6	100.0	100.0	
1965-66														
Exports for the month	119.8	129.7	143.3	130.0	141.8	148.7	140.1	156.8	152.8	138.3	127.9	163.5	1,692.7	
Cumulative up to the month end	119.8	249.5	392.8	522.8	664.6	813.3	953.4	1,110.2	1,263.0	1,401.3	1,529.2	1,692.7	1,692.7	
As per cent to total	7.1	14.7	23.2	30.9	39.3	48.0	56.3	65.6	74.6	82.8	90.3	100.0	100.0	
1966-67														
Exports for the month	123.4	128.7	99.8	101.5	142.6	129.7	148.5	119.1	139.0	138.2	118.6	152.9	1,542.0	
Cumulative up to the month end	123.4	252.1	351.9	453.4	596.0	725.7	874.2	993.3	1,132.3	1,270.5	1,389.1	1,542.0	1,542.0	
As per cent to total	8.0	16.3	22.8	29.4	38.6	47.1	56.7	64.4	73.4	82.4	90.1	100.0	100.0	
1967-68														
Exports for the month	122.4	107.9	128.7	136.1	119.1	149.0	161.0	138.0	141.0	140.7	122.5	131.8	1,598.2	
Cumulative up to the month end	122.4	230.3	359.0	495.1	614.2	763.0	924.2	1,062.2	1,203.2	1,343.9	1,466.4	1,598.2	1,598.2	
As per cent to total	7.6	14.4	22.5	31.0	38.4	47.7	57.8	66.5	75.3	84.1	91.8	100.0	100.0	
1968-69														
Exports for the month	138.4	143.1	129.2	150.9	177.5	157.1	165.3							
Cumulative up to the month end	138.4	281.5	410.7	561.6	739.1	896.2	1,061.7							

SOURCE: DGC&S data—statements issued by the Office of the Economic Adviser.

months, April to August 1968, and taking into account the likely outlook of exports of individual commodities during the remaining part of the year. This gave an estimate of export earnings amounting to \$1,766 million, which by some coincidence is the same as the "minimum estimate" derived earlier.

It can be confidently stated that the year 1968-69 will end with an increase of at least 10 per cent in exports as compared to the actual level in 1967-68. On the basis of the present trends, the figure may well be exceeded.

Increases are anticipated in respect of a large number of commodities. Each of the main broad groups (see Table IV on pp. 380-382), agriculture and allied products, minerals and manufactures, is expected to show an increase of 10-11 per cent. There are individual variations within each group such as less than 2 per cent increase in tea under the group "agriculture and allied products", a decline of 6 per cent in mica and an increase of 14 per cent in iron ore under the group "minerals", and an increase of 100 per cent in engineering goods and more than 25 per cent in iron and steel under the "manufactures" group.

Commoditywise data are now available for the five months, April-August 1968. Exports during these five months amounted to \$739 million: these were higher by about \$125 million or 20 per cent as compared to April-August 1967. It may be noted that these were also the highest ever recorded in April-August; the earlier record was \$689 million in April-August 1964. Exports of a number of commodities showed increases during this period. These were vegetable oils, cashew kernels, oilcakes and tobacco. Some minor increases were recorded in respect of spices (other than pepper), fish, coffee, cotton fabrics (mill-made), and leather (tanned and dressed). Among the non-traditional items, there was a considerable increase in export earnings from engineering goods, iron and steel, chemicals and allied products, and handicrafts. During this period, exports of a few commodities, however, showed decline; the largest decline was in respect of export of jute manufactures which came down by about \$26 million both as a result of fall in the quantum of exports as also the unit value of jute goods. Two important features of export performance during the five months of 1968-69 may be noted. One is that the increase in exports by \$125 million was in spite of the fact that the unit value of many of the export items showed a fall mainly because of depressed world conditions for agricultural exports. Another feature to be noted is that during the current year our dependence on a few traditional items, whose growth potential in exports is limited, began to diminish. Instead a considerable part of increase in exports is

TABLE IV
ESTIMATES OF EXPORTS: INDIA: 1968-69, 1969-70, 1973-74 AND 1978-79

Sl. no.	Commodity	Unit	1967-68 (actuals) ¹		1968-69		1969-70		1973-74		Total for Fourth Plan		1978-79	
			Qty.	Val.	Qty.	Val.	Qty.	Val.	Qty.	Val.	Qty.	Val.	Qty.	Val.
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1. Agriculture and allied products (including plantation crops)														
		Value	—	567.6	—	630.4	—	683.5	—	859.7	—	3,851.1	—	1,194.2
2. Vegetable oils (non-essential)														
		Thou. tonnes	17.0	5.3	57.2	20.0	61.0	21.3	76.0	26.7	342.5	120.0	150.0	52.0
3. Oilcakes														
		Thou. tonnes	746.3	60.5	900.0	73.1	1,050.0	85.3	1,400.0	113.7	6,125.0	490.9	2,150.0	174.3
4. Tobacco, un-manufactured														
		Thou. tonnes	55.4	46.5	72.0	60.0	75.0	62.7	80.0	66.7	387.5	323.3	100.0	84.0
5. Spices														
		Value	—	36.3	—	39.9	—	42.7	—	55.9	—	246.4	—	75.9
6. Pepper														
		Thou. tonnes	25.0	17.5	25.0	17.5	26.0	18.3	34.0	23.9	150.0	105.3	44.0	30.8
7. Others														
		Value	—	18.8	—	22.4	—	24.4	—	32.0	—	141.1	—	45.1
8. Sugar, raw and refined														
		Thou. tonnes	228.5	21.3	150.0	10.0	250.0	16.7	400.0	26.7	1,625.0	108.4	600.0	40.0
9. Raw cotton														
		Thou. tonnes	44.6	19.7	34.0	16.0	39.0	18.0	47.0	22.1	215.0	100.4	54.5	25.3
10. Fruits and vegetables														
		Value	—	69.9	—	93.3	—	93.3	—	105.3	—	496.6	—	144.0
11. Cashew kernels														
		Thou. tonnes	51.1	57.5	67.0	80.0	67.0	80.0	73.0	87.6	350.0	418.9	90.0	108.0
12. Others														
		Value	—	12.4	—	13.3	—	13.3	—	17.7	—	77.7	—	36.0

(In million \$)

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13. Raw wool	Thou. tonnes	9.2	7.5	9.5	7.9	9.7	8.0	10.3	8.4	50.0	41.1	11.2	9.2
14. Fish and fish preparations	Thou. tonnes	20.2	24.5	21.3	28.0	27.3	33.1	53.0	64.0	200.8	242.7	107.0	130.0
15. Hides and skins, raw	Value	—	10.0	—	6.8	—	11.1	—	21.1	—	80.3	—	30.0
16. Tea	Mill. kg.	203.4	240.1	207.4	244.7	212.0	250.1	231.4	273.1	1,108.5	1,308.0	257.9	304.3
17. Coffee	Mill. kg.	33.9	24.3	34.6	24.3	35.3	25.1	38.4	27.3	184.3	130.9	44.6	30.1
18. Foodgrains	Thou. tonnes	7.7	1.7	32.4	6.4	80.0	16.1	250.0	48.7	825.0	162.1	600.0	95.1
19. Pulses	Thou. tonnes	3.8	0.9	27.0	5.3	30.0	6.4	50.0	10.0	200.0	41.1	100.0	20.0
20. Rice	Thou. tonnes	3.9	0.8	5.4	1.1	50.0	9.7	200.0	38.7	625.0	121.0	500.0	75.1
21. Minerals	Value	—	134.7	—	149.1	—	164.7	—	237.4	—	1,005.0	—	338.3
22. Iron ore	Mill. tonnes	13.7	99.9	16.0	114.4	18.0	128.0	27.0	193.1	112.5	802.6	40.0	286.0
23. Manganese ore	Thou. tonnes	1,074.0	14.8	1,130.0	16.0	1,180.0	16.7	1,380.0	19.5	6,400.0	90.4	1,600.0	22.7
24. Mica	Mill. kg.	22.9	20.0	23.3	18.7	25.0	20.0	31.0	24.8	140.0	112.0	37.0	29.6
25. Manufactures	Value	—	727.1	—	802.9	—	849.6	—	1,132.5	—	4,955.5	—	1,650.7
26. Cotton fabrics	Mill. metres	450.2	87.1	491.6	96.0	509.0	100.8	626.0	124.5	2,862.5	563.3	688.0	136.7
27. Mill-made	Mill. metres	425.0	79.5	470.0	89.3	475.0	90.3	580.0	110.0	2,662.5	500.6	638.0	121.2
28. Handloom	Mill. metres	25.2	7.6	21.6	6.7	34.0	10.5	46.0	14.5	200.0	62.7	50.0	15.5
29. Fabrics of art silk	Mill. metres	6.1	1.9	19.0	4.7	22.0	5.3	44.0	10.7	165.0	40.0	60.0	14.7
30. Woollen fabrics	Value	—	2.5	—	3.5	—	3.5	—	6.0	—	23.7	—	10.0
31. Clothing	Value	—	19.2	—	24.0	—	24.0	—	34.0	—	145.1	—	68.0
32. Coir yarn and manufactures	Thou. tonnes	55.9	17.1	59.0	17.7	64.0	19.2	84.0	25.1	370.0	110.7	123.3	37.1
33. Jute manufactures	Thou. tonnes	752.0	312.0	700.0	279.1	750.0	299.0	825.0	328.6	3,938.0	1,569.3	940.0	374.7

TABLE IV (Contd.)

(o)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
34. Footwear		Mill. pairs	10.7	12.1	11.3	10.7	14.0	13.3	23.0	21.3	92.5	86.7	35.4	40.0
35. Leather and leather manufactures		Value	—	71.3	—	85.3	—	88.7	—	100.0	—	471.7	—	136.0
36. Leather tanned		Thou. tonnes	22.9	70.9	30.5	81.3	31.5	84.0	34.5	92.0	165.0	440.0	45.0	120.0
37. Leather manufactures		Value	—	0.4	—	4.0	—	4.7	—	8.0	—	31.7	—	16.0
38. Engineering goods		Value	—	43.3	—	86.7	—	93.3	—	180.1	—	683.3	—	300.0
39. Metal manufactures		Value	—	16.2	—	22.7	—	24.0	—	60.0	—	210.0	—	106.7
40. Machinery, other than electric		Value	—	10.4	—	18.0	—	19.3	—	46.7	—	165.1	—	73.3
41. Electric machinery		Value	—	7.5	—	22.6	—	24.0	—	26.7	—	126.6	—	46.7
42. Transport equipment		Value	—	7.5	—	20.7	—	22.7	—	40.0	—	156.5	—	60.0
43. Other engineering goods		Value	—	1.7	—	2.7	—	3.3	—	6.7	—	25.1	—	13.3
44. Handicrafts		Value	—	65.2	—	77.3	—	80.0	—	93.3	—	433.3	—	133.3
45. Iron and steel		Value	—	69.3	—	86.7	—	86.7	—	133.3	—	550.0	—	200.0
46. Ferro-manganese and ferro-alloys		Thou. tonnes	40.5	3.9	40.5	3.9	40.5	3.9	47.0	4.9	218.7	22.0	60.0	5.7
47. Chemicals and allied products (excl. essential oils) ^a		Value	—	15.9	—	20.0	—	24.0	—	40.0	—	160.0	—	80.0
48. Cotton waste		Thou. tonnes	25.8	6.3	33.0	7.3	36.0	7.9	48.0	10.7	210.0	46.4	60.6	14.5
49. Fertilisers		Thou. tonnes	—	—	—	—	—	—	—	20.0	—	50.0	—	100.0
50. SUB-TOTAL		Value	—	1,429.4	—	1,582.4	—	1,697.8	—	2,229.6	—	9,811.6	—	3,183.2
51. OTHER EXPORTS —UNSPECIFIED		Value	—	168.8	—	184.2	—	195.5	—	220.6	—	1,041.4	—	316.8
TOTAL		Value	—	1,598.2	—	1,766.6	—	1,893.3	—	2,450.2	—	10,853.0	—	3,500.0

SOURCE: ^aBased on DCI&S data.^aFigures in row 47 refer only to chemicals corresponding to SITC classification Section V minus essential oils.

accounted for by non-traditional items, mainly manufactured and semi-manufactured products.

As regards the direction of India's exports, data in respect of five months, April-August 1968, show that India's exports to all the regions of the world showed an increase during the period over the corresponding period of the last year, the largest increase being to ECAFE region. A notable feature of the export performance during these five months was that out of the total increase of \$125 million in exports to all regions, the bulk of the increase, i.e., \$113 million was in terms of foreign exchange and \$12 million with the East European countries.

IV. ESTIMATES OF EXPORTS DURING 1969-70 TO 1973-74 AND 1978-79

The estimates for India's exports for the years, 1969-70 and 1973-74, as also total export earnings for the Fourth Plan period as a whole are shown in Table IV. Values are shown in million dollars (which are readily converted into rupees at the rate of \$1=Rs 7.50). Tentative estimates have also been indicated for 1978-79.

A summary of exports by main groups of commodities is given in Table V on the next page.

Exports are expected to rise from \$1,600 million in 1967-68 to \$2,450 million in 1973-74 and \$3,500 million in 1978-79. The average annual growth rate of exports is 7.4 per cent in the period, 1967-68 to 1973-74, and during the next five years as well as in the five years beyond. Taking as base the year 1968-69, the annual rate of growth of exports over the decade will be just about 7 per cent on the basis of the estimated exports of \$1,767 million in 1968-69. The groups showing the fastest rise during the Fourth Plan are iron ore (11.6 per cent per year) and manufactures other than cotton and jute textiles (12.9 per cent). Agriculture and allied products come next, some fair distance behind, with growth rate of 7.2 per cent. The rest of the items taken together show a growth rate of only about 5 per cent, well below the average.

In preparing these estimates, use has been made of material available from the following sources:

- (1) Projections for Export Earnings for 1970-71 done by the Working Group on Exports for the Fourth Plan (July 1966).
- (2) Agricultural Commodities—Projections for 1975 and 1985, FAO (October 1966).
- (3) Report of Working Group on Restraint of Domestic Consumption for Promoting Exports (August 1967).

TABLE V
STRUCTURE OF INDIA'S EXPORTS: 1969-70, 1973-74 AND 1978-79

Sl. no.		Item	(Value in million \$)				[Rate of growth of exports (annual)] ¹			
			1967-68 (actuals)	1968-69	1969-70	1973-74	1973-74		1978-79	
							(a)	(b)	(a)	(b)
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1.	Agriculture and allied products (including plantation crops)	568 (35.5)	630 (35.7)	683 (36.1)	860 (35.1)	1,194 (34.1)	7.2	6.4	7.0	6.6
2.	Minerals	135 (8.5)	149 (8.4)	165 (8.7)	237 (9.7)	338 (9.7)	9.8	9.7	8.7	8.5
3.	Iron ore	100 (6.3)	114 (6.4)	128 (6.8)	193 (7.9)	286 (8.2)	11.6	11.1	10.0	9.6
4.	Manufactured goods	727 (45.5)	803 (45.5)	850 (44.9)	1,132 (46.2)	1,651 (47.2)	7.6	7.1	7.8	7.5
5.	Cotton textiles and jute manufactures	399 (25.0)	375 (21.2)	400 (21.1)	453 (18.5)	511 (14.6)	2.1	3.8	2.3	3.1
6.	All other manufactures	328 (20.5)	428 (24.3)	450 (23.8)	679 (27.7)	1,140 (32.6)	12.9	9.7	12.0	10.3
7.	Other exports—unspecified	168 (10.5)	184 (10.4)	195 (10.3)	221 (9.0)	317 (9.0)	4.7	3.7	6.0	5.6
TOTAL EXPORTS		1,598 (100)	1,766 (100)	1,893 (100)	2,450 (100)	3,500 (100)	7.4	6.8	7.4	7.1

(a) base 1967-68.

(b) base 1968-69.

NOTE: ¹Figures within bracket represent percentages to total.

- (4) Trade Prospects and Capital Needs of Developing Countries, UNCTAD secretariat (October 1967).
- (5) Commodity and Area studies prepared by the Indian Institute of Foreign Trade.
- (6) Departmental Studies of Working Groups, 1968.
- (7) Various published and unpublished studies on general and specific aspects of exports.

These estimates have been worked out after taking into account the world demand for India's export commodities and the estimates of production and domestic demand derived from the provisional production plans. They indicate in quantitative terms what could be reasonably aimed at. It is necessary to add, however, that these levels of exports would be reached only with very active and determined efforts.

According to the present estimates, total export earnings during the Fourth Plan period (1969-70 to 1973-74) are estimated at \$10.8 billion (Rs 8,140 crores), rising from \$1,600 million in 1967-68 to an estimated level of \$1,767 million (Rs 1,325 crores) in 1968-69 and \$2,450 million (Rs 1,838 crores) in 1973-74. Significant increases in export earnings are being envisaged in respect of oilcakes, fish and fish preparations, foodgrains, iron ore, iron and steel, and engineering goods. Commoditywise increases in exports in 1973-74 as compared to 1967-68 are shown in Table VI on p. 386 and the bases of export projections for individual items are discussed in the concluding part of this section.

BASES OF PROJECTIONS OF EXPORTS

Oilcakes: Exports of oilcakes from India registered a sharp increase from 166,000 tonnes in 1955-56 to 975,000 tonnes in 1964-65. Subsequently exports of oilcakes have shown a declining trend. Exports were 746,000 tonnes in 1967-68. This was mainly due to supply problems arising from lower production of oilseeds, particularly of groundnut. Three-fourths of exports of oilcakes from India consist of groundnut cake and about one-fourth of cottonseed cake.

During the Fourth Plan period, production of oilseeds is expected to increase to 12.0 million tonnes in 1973-74 as compared to the actual production of 9.0 million tonnes in 1967-68. The production of groundnut-seed is expected to increase to 8.6 million tonnes as compared to actual production of 6.3 million tonnes in 1967-68.

TABLE VI

INCREASES IN EXPORTS IN 1973-74 AND 1978-79 OVER 1967-68

(In million \$)

Sl. no.	Commodity	1967-68	Per cent of total	Increase over 1967-68		Per cent to total increase	
				1973-74	1978-79	1973-74	1978-79
(o)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Oilcakes	60.5	3.8	53.2	113.8	6.3	6.0
2.	Tobacco, unmanu- factured	46.5	2.9	20.2	37.5	2.4	2.0
3.	Pepper	17.5	1.1	6.4	13.3	0.8	0.7
4.	Spices, other than pepper	18.8	1.2	13.2	26.3	1.6	1.4
5.	Cashew kernels	57.5	3.6	30.1	50.5	3.5	2.7
6.	Fish and fish pre- parations	24.5	1.5	39.5	105.5	4.6	5.6
7.	Tea	240.1	15.0	33.0	64.2	3.9	3.4
8.	Coffee	24.3	1.5	3.0	5.8	0.4	0.3
9.	Foodgrains	1.7	0.1	47.0	93.4	5.5	4.9
10.	Cotton fabrics, mill- made	79.5	5.0	30.5	41.7	3.6	2.2
11.	Fabrics of art silk	1.9	0.1	8.8	12.8	1.0	0.7
12.	Clothing	19.2	1.2	14.8	48.8	1.7	2.6
13.	Jute manufactures	312.0	19.5	16.6	62.7	2.0	3.3
14.	Iron ore	99.9	6.2	93.2	186.1	11.0	9.8
15.	Leather—tanned & dressed	70.9	4.4	21.1	49.1	2.5	2.6
16.	Footwear	12.1	0.8	9.2	27.9	1.1	1.5
17.	Coir yarn and manu- factures	17.1	1.1	8.0	20.0	0.9	1.1
18.	Engineering goods	43.3	2.7	136.8	256.7	16.1	13.5
19.	Iron and steel	69.3	4.3	64.0	130.7	7.5	6.9
20.	Handicrafts	65.2	4.1	28.1	68.1	3.3	3.6
21.	Chemicals and allied products	15.9	1.0	24.1	64.1	2.8	3.4
22.	Fertilisers	—	—	20.0	100.0	2.4	5.3
TOTAL OF ITEMS (1 to 22)		1,297.8	81.1	720.8	1,579.0	84.8	83.1
TOTAL EXPORTS		1,600.0	100.0	850.0	1,900.0	100.0	100.0

As regards world trade in oilcakes, world exports of all varieties of oilcakes amounted to 8.0 million tonnes in 1965 and exports from India amounted to 0.9 million tonnes or about 11 per cent of world exports in the same year. World exports of oilcakes had increased by 10 per cent a year during the ten years, 1955 to 1965. On the assumption that world exports will grow at about the same rate during the eight years, 1966 to 1973, these are placed at 17.0 million tonnes in 1973-74. Exports from India are estimated to go up to 1.4 million tonnes in 1973-74, that is, by 9.5 per cent a year during the period, 1967-68 to 1973-74. Foreign exchange earnings are estimated at \$114 million in 1973-74. In working out these estimates, a unit value of \$81 per tonne, as in 1967-68, has been assumed.²

Tobacco, unmanufactured: Exports of tobacco (unmanufactured) declined abnormally to 37,500 tonnes in 1966-67 as compared to 57,000 tonnes in 1965-66 due to inadequate production which fell from 346,000 tonnes in 1964-65 to 298,000 tonnes in 1965-66. Exports of tobacco picked up in 1967-68 due to increased production and amounted to 55,000 tonnes.

As regards world trade in tobacco, almost one-fourth of the world output of tobacco reaches the international market. Among the developed countries, the United States is the largest producer and exporter of tobacco. In the last decade, the United States' share of the trade has declined from 40 per cent to 20 per cent as a result of the strong competition offered by developing countries. In 1961-63, the developing countries taken together exported about one-fourth of their tobacco production. The bulk of these exports originated in Rhodesia, India, Brazil and Philippines. As pointed out by a recent FAO study,³ "India's exports of tobacco are expected to increase further by 1975, especially as Indian tobacco is offered at low prices, enjoys tariff advantages in the Commonwealth countries' market and has found a potentially expanding market in the USSR." Further, specific programmes are expected to be taken up for increasing production of exportable varieties of tobacco such as flue-cured Virginia type during the Fourth Plan period. Production of unmanufactured tobacco is expected to increase to 437,000 tonnes in 1973-74. In working out the estimates of exports for unmanufactured tobacco from India, these and other favourable factors have been taken into account. Exports are expected to go up to 80,000 tonnes by 1973-74. Foreign exchange earnings from

²For most of the items, unit value adopted for the projections is that of 1967-68. In some cases, where there was reason to expect a higher or lower unit value in future years, a departure was made from the general procedure.

³FAO, *Agricultural Commodity Projections: 1975 and 1985*, October 1966.

tobacco are estimated to go up to \$67 million in 1973-74. This implies a rate of growth of 6 per cent with 1967-68 as base.

Pepper: Exports of pepper fell to 21,800 tonnes in 1966-67 as compared to exports of 26,000 tonnes in 1965-66 and export earnings declined from \$23.3 million in 1965-66 to \$17.0 million in 1966-67. More than three-fourths of black pepper produced in India is exported. There was some decline in the production of black pepper, from 24,000 tonnes in 1964-65 to 23,000 tonnes in 1966-67.

There is considerable scope for increasing exports, particularly to the USSR and other East European countries. In addition to exports of black pepper, there are good prospects of exporting white pepper. The production of pepper is expected to rise to 42,000 tonnes by 1973-74. Assuming that internal consumption would not go beyond 8,000 tonnes a year by 1973-74 (as compared to 6,000 tonnes in 1967-68), exports of pepper are estimated at 34,000 tonnes in 1973-74. Keeping in view wide fluctuations in the unit value of pepper, which ranged between \$1.03 per kg. (highest) in 1960-61 and \$0.65 per kg. (lowest) in 1963-64, estimates of exports have been worked out at \$0.70 per kg. Foreign exchange earnings in 1973-74 are estimated at \$23.9 million.

Cashew Kernels: Exports of cashew kernels increased steadily from 26,000 tonnes in 1950-51 to 56,000 tonnes in 1964-65. Thereafter exports declined somewhat and stood at 51,000 tonnes in 1967-68. Foreign exchange earnings from this commodity amounted to \$57.4 million in that year.

Exports of cashew kernels from India are made both from domestically produced nuts as well as those imported from East Africa. The domestic production of raw nuts in 1965-66 amounted to 135,000 tonnes. According to certain estimates, only about two-third of production reaches the factories processing cashew for export due to faulty collection methods. In addition, a quantity of 161,000 tonnes was imported from abroad.

There is a good demand abroad in the USA, and west and east European countries for cashew kernels. Exports of cashew kernels from India during the Fourth Plan period and subsequent years will very much depend on the success with which India can increase production of raw cashew-nuts in the country. The main source of supply for raw cashew-nuts is at present East Africa. Since the indigenous cashew-nut processing industry is expected to develop rapidly in this region, this source of supply of raw nuts may not be available to India after a few years. It is necessary to give urgent attention to increase production of raw cashew in the country. It

is also very necessary that better collection arrangements be made of raw cashew produced in the country in order that larger supplies become available to factories processing cashew for export. As cashew has ready market abroad, domestic consumption of this luxury product should be kept down to the minimum to release supplies for export.

On the assumption that the production of raw cashew-nuts increases to about 200,000 tonnes in 1973-74 and imports of raw nuts from East Africa are continued till the domestic production catches up with the requirements, it has been estimated that exports of cashew kernels from India may go up from 51,000 tonnes in 1967-68 to 73,000 tonnes in 1973-74. Earnings from this source are expected to amount to \$87.6 million.

Fish and Fish Preparations: Exports of fish and fish preparations increased to \$24.5 million in 1967-68 as compared to export earnings of \$8.2 million in 1955-56. While the quantity exported remained stagnant around 20,000 tonnes, the value of exports increased considerably.

There has been a shift in the pattern and direction of India's fish exports since 1961. Prior to 1961, Ceylon and Burma were the chief buyers of Indian dry fish and prawns; but since then, exports to these two countries have declined. Instead the USA has now emerged as the main buyer of prawns, dry fish, lobsters, frog legs, etc. These products constitute about 80 to 90 per cent of India's total fish exports.

Production of fish in the country is expected to increase to 2.0 million tonnes in 1973-74 as compared to actual production of 1.4 million tonnes in 1967-68. With this level of production, it is estimated that it will be possible to achieve a level of exports of fish and fish preparations valued at \$64 million in 1973-74 compared to \$25 million in 1967-68. This would, however, require provision of a number of proper facilities such as those relating to provision of trawlers, mechanised boats, landing strips and processing facilities to the fishing industry. Investment funds and necessary allocation of foreign exchange should be provided on a priority basis for these programmes, as export earnings from this source can be increased substantially and rapidly in view of the ready market for these products in the USA and some other countries.

Tea: As compared to exports of tea amounting to 197.4 million kg. in 1965-66, exports in 1966-67 dropped to 190.4 million kg. due to dislocation in purchases immediately after devaluation. In 1967-68, exports recovered and amounted to 203 million kg.

Production of tea is expected to increase from 385 million kg. in 1967-68 to 500 million kg. in 1973-74.

As regards the prospects of increase in exports of tea from India, it may be noted that according to an UNCTAD study,⁴ the net level of world trade in tea is expected to rise by 2.2 to 2.6 per cent a year during the period 1960-75. On the basis of the lower rate of 2.2 per cent, Indian exports of tea are estimated to go up from 203 million kg. in 1967-68 to 231.4 million kg. in 1973-74. This may be regarded as the minimum estimate. The unit value of exports has been taken at \$1.18 per kg. Foreign exchange earnings are estimated at \$273 million in 1973-74. (The higher rate of growth could make a difference of about \$7 million.)

Coffee: Export of coffee was somewhat lower in 1966-67 (25,800 tonnes) compared to that in 1965-66 (26,500 tonnes). Though there was only a slight fall in the quantity, there was a much large fall in the unit value of exports of coffee, resulting in a decline in earnings from \$27.3 million in 1965-66 to \$21.4 million in 1966-67.

As regards world demand, according to an UNCTAD study,⁴ the world exports of coffee are expected to increase at the rate of 2.1 to 2.3 per cent per annum during the period 1960-75. Assuming the lower rate of growth of 2.1 per cent a year as estimated by UNCTAD secretariat, exports from India are estimated to go up from 34,000 tonnes in 1967-68 to 38,000 tonnes in 1973-74. It would be necessary for India to increase exports to both quota and non-quota countries.

Iron Ore: Exports of iron ore amounted to 13.7 million tonnes valued at \$99.8 million in 1967-68 as compared to a level of 3.1 million tonnes valued at \$36 million in 1960-61. This increase was made possible by substantial increase in purchases of iron ore from India by Japan and East European countries.

The prospects of increasing exports of iron ore are good during the Fourth Plan period. It should be possible to double iron ore exports through careful planning and building of mining, transport and port facilities. If these are solved expeditiously and costs are kept to the minimum, there will be no problem of demand. However, keeping a certain margin, exports of iron ore are conservatively put at 27 million tonnes in 1973-74, valued at \$193.0 million.

Cotton Fabrics: Exports of mill-made cloth fell to 403 million metres in 1966-67 as compared to 513 million metres in 1965-66. Exports declined due to a shortage of raw cotton supplies as well

⁴UNCTAD secretariat, *Trade Prospects and Capital Needs of Developing Countries*, October 1967.

as slackening of demand in the UK and other West European countries. In 1967-68, exports of mill-made cloth recovered to 425 million metres.

Though production of mill-made cloth is expected to register an increase from 4,200 million metres in 1967-68 to 5,500 million metres in 1973-74, prospects of substantial increase in exports of mill-made cloth do not appear to be bright due to curtailment of markets because of increasing domestic production in importing countries, stiff competition from competitors like Japan, Hong Kong, China and Pakistan and also competition from synthetic fibres. According to a recent export survey of textile and made-up garments,⁵ world trade in cotton textiles has remained remarkably stationary at 800,000 tonnes per year. During this period, the consumption and output of cotton textiles has increased at a steady rate of about 3 to 4 per cent per year. But this is not reflected in international trade for the simple reason that countries, particularly developing countries, have set up production capacity of their own. According to this study, "... the world market for cotton fabrics will continue to decline as a proportion of the world output with more and more countries competing for the slice of the stagnating market". Therefore, adequate measures will have to be taken to rationalise and modernise Indian textile industry even for India to maintain its share in the world textile market. The increase in exports of mill-made cloth assumed in the Fourth Plan period from 425 million metres in 1967-68 to 580 million metres (valued at \$110 million) in 1973-74, should be regarded as only a marginal improvement over the level of exports of 513 million metres in 1965-66.

Jute Manufactures: Exports of jute manufactures declined to 0.74 million tonnes in 1966-67 from 0.9 million tonnes in 1965-66. The main reason for this decline was shortage of raw jute supplies. Other reasons were dislocation in contracts following devaluation of the rupee in June 1966 and continuing stiff competition from Pakistan. In 1967-68, exports of jute manufactures amounted to 0.75 million tonnes.

Production of jute goods in India is expected to go up from 1.2 million tonnes in 1967-68 to 1.7 million tonnes in 1973-74.

Regarding prospects of exports, according to an FAO report,⁶ the total volume of export availabilities in 1975 could well be in the range of 2.24 to 2.65 million tonnes, compared with net

⁵USAID Survey conducted by Economic and Scientific Research Foundation, July 1968.

⁶FAO, *Agricultural Commodities Projections: 1975 and 1985*, October 1966.

import requirements in the rest of the world of only 1.84 to 2.28 million tonnes. Hence some 15 to 20 per cent of jute and jute goods available for export from Asia and Far East may be in excess of the world market requirements at 1961-63 prices. The same study has specifically projected exports from India at 900,000 tonnes in 1975. Keeping in view the findings of this study and the stiff competition from Pakistan, only a marginal increase in exports is envisaged. Exports are estimated at 0.83 million tonnes valued at \$329 million in 1973-74. Since the FAO study has estimated a surplus of jute goods in the world market, the unit value of exports reckoned in these estimates is about \$400 per tonne as compared to \$452 per tonne prevailing in 1966-67.

Engineering Goods: This comprises various items of manufactures of metals, machinery other than electric, electric machinery and transport equipment. Exports of engineering goods increased to \$43.5 million in 1967-68 as compared to \$17.8 million in 1960-61.

The engineering industry in India has made considerable progress during the last ten years. A wide range of products is being manufactured by the industry. Although domestic output doubled during the Third Plan, the value of exports is still very small considering the volume of world trade in engineering goods. The world exports of engineering products are estimated roughly at \$30 billion; India's share in 1967-68 works out to less than 0.15 per cent. There is a vast potential market abroad, provided Indian goods are competitive in quality and price and delivery schedule and are backed, where necessary, by adequate after-sale servicing.

Production of various categories of engineering goods is expected to increase considerably during the Fourth Plan period. At present, some of these products are not being exported because of high prices. Recently, the Government has introduced a scheme of cash assistance to exporters of engineering products. If in addition to this, a number of other suitable steps are taken such as supply of raw materials to the engineering industry at international prices and special assistance to exporters of big orders, exports of engineering products from India can show a substantial increase. Specifically, exports of items such as railway coaches, wagons, rails, bicycles, electric fans, electric wires and cables, transmission line towers, tubes and pipes, iron and steel castings, and aluminium wares, have a large potential for increase during the Fourth Plan period. The recent agreement of the Government of India to make bulk supply of railway wagons to the USSR over the next few years is both significant and encouraging. A number of other countries such as South Korea and East European countries have

also indicated their willingness to take certain categories of engineering goods from India. Taking these factors into account, it should be possible for India to increase its share in the world trade in engineering goods. Export earnings from engineering goods are estimated at \$180 million in 1973-74.

Foodgrains: India has been exporting small quantities of pulses and rice. In 1966-67, 31,000 tonnes of pulses were exported which fetched foreign exchange of \$5.4 million.

There are now good prospects of sustained increase of foodgrains production in the country. There is, from all evidence, a technological break-through in agriculture. The high-yielding varieties of seeds are coming rapidly in use and large investments and inputs are being provided for to meet the requirements of agriculturists including an average annual foreign exchange expenditure of \$350-400 million for import of fertilisers and other materials and goods to supplement growing domestic supplies. Such a massive effort in developing agriculture should also make it feasible for India to enter world market for rice and pulses in a bigger way. The Ministry of Food and Agriculture envisages a surplus of rice in the country during the Fourth Plan period. There is a great demand in other countries for finer quality of rice like *basmati*, which India can produce in larger quantity and earmark for export. The volume of international rice trade in 1966 amounted to 7 million tonnes. In terms of value, it has reached an all-time high of about \$1,000 million. The unit value averages \$143 per tonne of rice taken as a whole; the price is much higher for better quality. Considering the volume of trade in rice in international market, it should be possible for India to export at least 200,000 tonnes of rice of superior variety by 1973-74, which should fetch foreign exchange earnings of \$39 million. In addition, exports of 50,000 tonnes of pulses is indicated in 1973-74. Thus total foreign exchange earnings from exports of foodgrains in 1973-74 have been estimated at \$49 million.⁷ Considering the likely production of rice and pulses in the country during the Fourth Plan, the magnitudes involved in exports of this order are small compared to domestic supply. Indeed, if possible, effort should be made to substantially exceed this target.

Iron and Steel: Exports of iron and steel have shown a striking increase during the last three years, increasing from \$17.5 million in 1965-66 to about \$70 million in 1967-68. Prospects of increasing exports of iron and steel are quite good. These exports are

⁷It is reported that Pakistan exported 200,000 tonnes of rice in 1967-68 and has targeted export of 400,000 tonnes this year.

estimated to increase to \$133 million in 1973-74. This level would imply an export of 0.5 million tonnes of pig iron and 1.5 million tonnes of steel. Total export earnings from iron and steel during the Fourth Plan period are estimated at \$550 million. These could be much higher in later periods. Iron and steel industry qualifies to be developed as an international industry in India; the country enjoys natural advantage in it. This will call for careful long-term planning of this sector, keeping in view the internal requirements as well as a fair surplus for export. Maximum attention will have to be given to the building up of a modern, technologically efficient and cost-conscious industry.

Fertilisers: It is proposed to build up a number of fertiliser factories during the Fourth Plan period. All these plants are the most modern, using up-to-date technology and enjoying economies of scale. Many of them are located at port sites. This offers excellent opportunity for India to export substantial quantities of nitrogenous fertilisers to neighbouring countries at competitive prices. Even by 1973-74, 100,000-200,000 tonnes of nitrogenous fertilisers in terms of (N) could be made available for export. Production targets should be high enough for 1973-74 and later years to include export demand. Export of 120,000 tonnes of fertilisers (N) has been estimated for 1973-74 going up to 600,000 tonnes by 1978-79. This would fetch \$20 million of foreign exchange in 1973-74 and \$100 million in 1978-79.

V. POLICY MEASURES AND FOLLOW-UP ACTION

The estimates indicated in the previous section of this paper are meant to indicate realistic magnitudes of prospects of exports in the next five and ten years. It emphasises the urgency of drawing up a careful programme of exports for each year of the Plan period as an integral part of the Annual Plan, adjusting the programme to the situation of the particular year in regard to supply and demand conditions. Some such attempt was made earlier in the Commerce Ministry, and it may be desirable to revive this activity in close cooperation with the concerned Ministries, State Trading Corporation, Commodity Boards, Export Promotion Councils, export houses, representatives of industry and trade and institutions like the Indian Institute of Foreign Trade. More concrete investigations by competent persons and authorities will be required before a well thought out programme of exports can be drawn up for the Fourth Plan. Indeed it is necessary to institute the practice. Also all policy measures and financial and organisational support needed to achieve this target should be indicated in the export plan, and assured by the government. Some of the general measures

needed to promote exports, which have been proposed from time to time, are given below:

- (a) *Production Policies*: Plan targets in agriculture and industry should take into account fully the export demand together with domestic demand. Much greater attention needs to be given to the costs of production to make the products marketable without calling for continuing subsidies. To a considerable extent, the present difficulties in increasing our exports owe their origin to the relative neglect of cost considerations in determining the size, location and cost of investments of new plants. A protected domestic market has also been responsible for making management less quality and cost conscious. In view of the compelling urgency to expand and diversify exports very rapidly, the problem deserves special attention. For a number of selected industries such as iron ore, iron and steel products, prawns and other marine products, ready-made garments, oilcakes, rice, fruits and vegetables, railway wagons and rails, transmission line towers, cement, drugs, chemicals and various engineering goods which offer good prospects of increased exports, adequate investments must be planned, and the concerned parties encouraged in every way to secure larger markets for Indian exports on the basis of a long-term strategy.
- (b) *Restraints on Consumption*: In enlarging exportable surpluses it might be necessary to restrain consumption for certain items, when production cannot be expanded easily by fiscal devices such as levy of excise duty, pre-emption for exports of specific portions of the output and reservation of certain varieties for export.
- (c) *Quality Control*: During the last few years, quality control has been enforced rigorously and more and more commodities are being brought under the scheme of pre-shipment inspection. It is necessary that all export commodities are brought under its purview at an early date.
- (d) *Profitability*: Profitability of exports will be the decisive factor in making industrialists export-minded. Rupee earnings from export after devaluation were expected to be high enough for most products in the export trade of India. Since domestic prices continue to be high, this expectation has not fully materialised. Cost reduction is of the highest importance, but there may also be need for certain marginal incentives for specific products for limited periods.

- (e) *International Commercial Policy*: Various policy measures adopted at home to promote exports could not be effective unless greater access is granted by the importing countries to the exports of developing countries including India. In international forums, India along with other developing countries, has been emphasising the need on the part of the developed countries for this aspect of the matter. The results achieved in this direction at the UNCTAD-II have not been very encouraging. It is essential that India continues to press this point of view at various international forums.
- (f) *Market Surveys*: Market surveys abroad are essential part of export promotion effort. Various organisations such as the Indian Institute of Foreign Trade, Export Promotion Councils, Commodity Boards and certain international organisations have been conducting surveys abroad for India's export commodities. Purposeful investigations in depth for selected commodities and for selected markets, entrusted to competent persons, will greatly help in indentifying problems and suggesting suitable solutions. Such work needs to be placed on a systematic footing.
- (g) *Reduction of Costs*: Measures intended to provide a larger incentive for exports to manufacturers and traders, specially those concerned with the non-traditional items, have essentially a short-term purpose. They will become self-defeating if continuous efforts are not made at the same time to reduce costs, so that a fair proportion of India's industry will in fact be competitive. The proper scale and location of plants, efficient technology, good management and labour policies all have a part to play.
- (h) *Fiscal Relief*: The Central and the various State Governments have imposed various fiscal levies, both direct and indirect. It is necessary to provide suitable relief or exemption in respect of some of these levies, which impinge on the exports of certain commodities.
- (i) *Special Consideration*: Industrial units, which play an important part in the export drive, would be given "special consideration in matters of capacity expansion, import of equipment and raw materials and so on". Industrial Development Bank should extend direct medium-term credit to manufacturer-exporters of capital and engineering goods and services. The direct assistance will be rendered in

participation with commercial banks authorised to deal in foreign exchange. The participation scheme also envisages the granting of guarantee facilities and will be in addition to the existing scheme of refinance for medium-term export credit. The extent of participation and the rate of interest will be worked out in consultation with the manufacturer-exporters and their banks. But the credit with the maturity period from six months to 10 years will bear a lower interest than the existing statutory maximum of 6 per cent per annum for export credit, both pre-shipment and post-shipment.

In addition to the general measures, it would be necessary to adopt suitable measures for promoting exports of specific commodities. While a detailed prescription of such measures could only be worked out after considerable work and consultations between the Ministry of Commerce, on the one hand, and the concerned Ministries, Departments, etc., on the other, some of these measures have been summarily indicated under the respective commodity notes in Section IV.

APPENDIX

CHANGES IN DIRECTION OF EXPORTS

INDIA: 1951-52 TO 1967-68

Table VII on the next page shows the direction of India's exports from 1951-52 to 1967-68 to various regions and selected countries. An analysis of export data for 1968-69 has also been added on the basis of figures available for five months, April to August 1968.

A striking feature of the directional change is the very rapid expansion of trade with the USSR and socialist countries of East Europe since 1955-56. Exports rose from equivalent of \$11 million in 1955-56 to \$105 million in 1960-61 and \$300 million in 1967-68. Among the countries of Asia and Oceania, which account together for 26 per cent of India's exports, Japan's share was nearly 20 per cent in 1960-61 and 40 per cent in 1967-68. Exports to the USA have increased moderately and were 50 per cent higher in 1967-68 than in 1955-56. On the other extreme, exports to Africa have remained virtually stagnant at about \$100 million all these years. Exports to the UK have actually declined in constant prices and the relative share of the UK in India's exports has come down from about a quarter to less than one-fifth during the last 12 years.

One of the interesting problems of planning for exports in a bolder way for future years is the need to conceptualise a pattern of trade with different countries, which enables India to import its requirements on the best terms

TABLE VII
DIRECTION OF EXPORTS BY SELECTED REGIONS AND COUNTRIES: INDIA: 1951-52, 1955-56 AND 1960-61 TO 1968-69

Region	1951-52	1955-56	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69 ^a
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(Percentage) ¹											
I. East Europe Rupee payment area countries											
USSR	1.2	0.8	7.7	9.5	12.8	13.7	17.7	19.4	19.5	18.8	20.4
Czechoslovakia	0.9	0.5	4.5	4.7	5.3	6.6	9.6	11.5	10.7	10.2	11.4
Yugoslavia	0.2	0.2	1.1	1.3	1.6	2.0	2.0	2.0	2.5	2.4	2.7
West Europe	Negl.	Negl.	0.5	0.9	1.6	1.2	1.4	1.4	1.6	1.0	1.3
ECM	34.5	44.6	37.4	34.3	33.9	31.7	29.7	23.2	27.2	28.6	25.7
West Germany	6.1	8.7	8.1	8.3	7.8	7.8	7.0	6.9	7.7	7.4	6.1
France	1.3	2.3	3.1	3.3	2.6	2.5	2.2	2.2	2.2	1.9	2.2
Belgium	1.5	1.1	1.4	1.2	1.3	1.4	1.5	1.4	1.6	1.3	1.3
EFTA	1.1	1.4	0.8	0.9	0.8	1.0	1.0	1.2	1.5	1.7	2.1
UK	26.8	26.7	27.8	24.7	24.0	22.2	21.7	19.3	18.6	20.3	17.3
Asia and Oceania	25.6	25.8	26.9	23.7	22.7	20.6	20.5	18.1	17.5	19.1	16.2
ECAFE	30.4	27.5	25.8	25.9	23.2	27.1	25.0	23.3	24.3	26.3	29.8
Japan	27.7	23.5	22.2	22.4	20.0	23.3	21.7	19.7	20.9	22.6	24.7
Australia	2.0	4.7	5.5	8.2	6.1	7.4	7.4	7.1	9.3	11.3	11.3
Ceylon	6.4	3.8	3.5	2.4	2.6	2.2	2.5	2.2	2.3	2.3	2.1
UAR	2.3	3.2	2.9	2.5	1.9	2.4	1.8	1.6	1.6	1.3	1.6
Sudan	6.8	7.7	7.6	8.3	6.9	5.8	5.7	7.7	6.2	5.9	5.1
Americas	0.9	1.5	2.1	1.9	1.8	1.6	1.8	3.4	2.2	1.8	1.2
USA	1.0	0.9	1.5	1.5	1.2	1.0	0.8	1.0	1.3	1.7	1.4
Canada	27.1	19.4	21.5	22.0	23.2	21.7	21.9	22.3	22.8	20.4	19.1
TOTAL EXPORTS: ALL REGIONS (value in million \$)	17.9	13.5	16.0	17.0	16.0	16.4	17.8	18.3	19.0	17.3	16.6
TOTAL EXPORTS (REVISED) (value in million \$)	2.2	2.2	2.7	2.6	3.1	2.7	2.1	2.5	2.7	2.5	2.0
	1,557 (100)	1,355 (100)	1,349 (100)	1,427 (100)	1,520 (100)	1,666 (100)	1,711 (100)	1,694 (100)	1,542 (100)	1,598 (100)	100.0
	1,540	1,253	1,387	1,428	1,499	1,666	1,715	1,693	1,542	1,598	

NOTE: ¹All figures in percentage of total exports.

^aBased on monthly averages for five months, April-August 1968.

possible according to its long-term plans and in a way which is mutually advantageous to India and its trading partners. This is partly an analytical and partly an operational problem. A prerequisite is knowledge of the emerging development—economic and technological—in different countries and a careful assessment of possibilities of engaging in trade in different commodities and markets based on adequate analysis. Long-term trade plans with socialist countries are helpful in reducing uncertainties, but careful thought has to be given to the selection of items, which will be imported in exchange and will be useful to the economy. Similarly, room will have to be left for import of certain items in the absence of which trade with particular countries might be unduly hampered. Studies on export planning must also include such topics within their scope.

INDO-JAPAN TRADE AND INDUSTRIAL COLLABORATION—POSSIBILITIES AND PROSPECTS

By H.D. Shourie

INDIA and Japan, separated by distance on the Asian map, have in the recent years sought ways and means of coming nearer together and establishing closer economic relations. Till recently there was lack of positive and deliberate effort on the part of either of them to stimulate greater trade and economic collaboration, for they both, because of historical reasons, primarily looked westwards. It is now realised in both the countries that in the interest of greater economic integration in the Asian region there is need of their developing closer economic relations to mutual advantage.

The need and desire of coming closer to each other was prominently evidenced in the Indo-Japanese Round Table Conference which was recently held in Delhi in November 1968. Considerable preparatory work had been done in both the countries for this Conference under the auspices of the India and Japan Committees which had been set up some time ago. The objective of the Conference was to study the scope of long-term economic, educational and cultural relations between the two countries. Leading economists, businessmen and educationists of the two countries participated in the Conference. Deliberations of the Conference enabled frank exchange of views and have led to very fruitful results. These deliberations have paved the way to greater Indo-Japanese cooperation in diverse fields and will hopefully help in dispelling some of the misunderstandings in Japan concerning the economic health and investment climate in India.

For enabling an examination of the areas of common interest of industrial and trade development, it will be worthwhile initially to identify some of the salient features of economic development in both the countries.

JAPANESE ECONOMIC GROWTH

In the last decade, the Japanese economy has grown very fast, touching the growth rate of 10.3 per cent, a record unmatched in the post-War world. In 1966, the GNP rose approximately to \$97 billion, more than four times that of 1955. The vast economic

growth has had its repercussions in rising prices, labour shortages, occasional balance of payments difficulties and certain problems in the provision of services and facilities, etc. Taking account of these problems in relation to the economic growth, the Japanese Government has given up its Medium-Term Economic Plan and has preferred to adopt instead the adjustment measures which would combine growth with stability. The problems arising from the economic growth in recent years have also highlighted the urgency of greater cooperation with Asian countries because it is believed that it would accelerate the shift in Japanese production and trade towards higher technology and capital-intensive sectors where the degree of value added is greater and the contribution to the national economy is higher.

In 1965, forty-three per cent of the Japanese exports were in the middle range of 35 to 50 per cent "value-added-to-raw-material" class of exports. In this group, Asia has the highest concentration ratio, accounting for 30 per cent of the Japanese exports. It is increasingly realised that any upward shift in higher "value-added" exports of Japan will involve need of greater attention to the products exported to Asia, as the Pacific Basin countries, comprising Australia, New Zealand, Canada and the USA, imported 45 per cent of the 51 per cent of Japanese exports of less than 35 per cent "value-added" ratio goods. Asia could thus provide an impetus for desirable change in Japan's production and export structure, while Japan could provide a similar stimulus to the growth of labour-intensive and simple technology manufactures in Asia. In this process, the Japanese exports would be more than recompensed for any loss. Larger purchases of capital goods by the Asian countries could be linked with larger earnings from exports of simple manufactures and light industrial goods to Japan.

ECONOMIC DEVELOPMENT IN INDIA

In Asia, India is one of the prominent countries modernising and industrialising its economy. It has made noticeable progress in the last two decades and has today a diversified industrial base, well-developed infrastructure for future development, and a stable and growing market. It has to its credit significant achievements in the fields of agriculture and industry. Food production rose from 57 million tonnes in 1951-52 to 89 million tonnes in 1964-65 and, after two bad years, touched 95 million tonnes in 1967-68. Commercial crops have registered a marked increase. Between 1950-51 and 1964-65, oilseeds production rose by 67 per cent, sugarcane by 76 per cent, raw cotton by 97 per cent and raw jute by 82 per cent. With the new agricultural strategy, further increase in production will come about.

Industrial production in the country rose by about 160 per cent between 1951 and 1967. The expansion of industry is evidenced by figures in certain areas of production. Production of steel ingots rose from 1.5 million tonnes to 6.6 million tonnes; nitrogenous fertilisers from 9,000 tonnes to 293,000 tonnes; bicycles from 99,000 to 1,719,000; radio receivers from 54,000 to 760,000; electric fans from 200,000 to 1,400,000. Number of commercial vehicles on the road has increased from 116,000 to 362,000. There has been five-fold increase in the shipping tonnage and more than five-fold increase in power generation.

The extent of existing cooperation between India and Japan, in the shape of industrial collaboration, trade collaboration and financial collaboration, and the scope and possibilities of expansion of cooperation in these respective fields, have to be examined against the background of these facts of economic development of the two countries. These facts guided the deliberations of the Round Table Conference when considering the ways and means for enlarging the areas of collaboration.

INDUSTRIAL COLLABORATION

Indo-Japanese industrial collaboration has in the recent years found expression in the establishment of a number of important industries in India. These industries cover a wide range including electric cables, aluminium conductors, insulation material, electric motors, oil circuit breakers, starters, transistors, flash lamps, vacuum-flasks, chemical plants, rayon yarn, dye-stuffs, filaments, cement machinery, X-ray units, loud-speakers, timepieces, wrist-watches, thermometers, fountain pens and nibs, knitting needles, road rollers, spinning machinery, lathes, optics for microscopes, dry batteries, fish freezing plants, rice milling plants, etc. Japan has also collaborated in specific development projects such as agricultural demonstration farms, marine products processing & training centre at Mangalore, and the Prototype Production & Training Centre at Howrah. Under the Colombo Plan, Japan has provided services of experts and training facilities for the development of small-scale industries, fisheries, agriculture and engineering.

These areas of industrial collaboration signify the vast potential that exists for expansion of industries in India with the help of Japanese industries. It is noteworthy, however, that out of the total foreign investments made abroad by the Japanese industries, aggregating to about \$900 million, India has received only \$10 million. It is contended that the low equity debt ratio for Japanese industries, ranging from 20 to 25 per cent in the recent past, has been the cause of inadequate scope for investment abroad, though it is hoped

that the position will improve in the coming years, particularly because the further expansion of Japanese industries is impeded by manpower shortages and mounting labour costs, forcing Japan to collaborate with labour-surplus countries.

In the context of the strides made in the development of industries in India, including the emphasis on the expansion of public sector, it is an obvious fact that the Indian market provides a vast opportunity for the development and expansion of industries. Development with stability has been the corner-stone of India's economic policy, and the country has had to its credit a clean record of exchange stability till the recent past when circumstances rendered it inevitable to resort to devaluation of the rupee. During 1966-67 and 1967-68 the country passed through serious problems of droughts and exchange crises, but these have been overcome and the economy is now steadily recovering. In the Round Table Conference it was recognised that on the basis of these facts any apprehensions about stability in India seemed to be misplaced. It was also recognised that the growth of public sector in the country does not in any way limit the expansion of private sector.

Effort has continuously been made in India to create and maintain a congenial climate for foreign private capital by allowing repatriation not only of profits and dividends but also of capital, by offering parity of treatment to foreign-owned and wholly Indian enterprises and by ensuring security of capital through constitutional safeguards. For facilitating the growth of industrial collaboration, the Government of India has liberalised the procedures of industrial licensing and import licensing. Letter of Intent, constituting an indication that a particular line of manufacture will be favourably considered by the Government, is now expeditiously issued to the foreign investors who come forth with well-conceived project proposals. Import policy in respect of raw materials, components and spares for priority industries has been liberalised. For encouraging the growth of export industries, a number of facilities, including the right to import raw materials and components from sources of one's own choice, have been provided to the manufacturers and exporters. Applications from export industries for expansion and import of requisite materials are given preferential treatment.

For encouraging new investments, both domestic and foreign, a wide range of fiscal concessions have been announced. Tax concessions available to the foreign investors include *inter alia* lower income-tax rates on inter-corporate dividends, tax-free interest on loans and approved securities, tax exemption in the case

of interest on deposits in "non-resident account", and avoidance of double taxation.

It was stated in the Round Table Conference that the Government of India would shortly publish separate lists of industries indicating the fields in which (i) equity participation and technical collaboration will be permitted, (ii) foreign technical collaboration alone will be permitted, and (iii) no foreign collaboration or investment will be allowed. The publication of these lists of industries will remove any uncertainty which may still be prevalent. A Foreign Investment Board has been established, possessing comprehensive powers to sanction foreign investments and collaborations.

In relation to the development of industries in India on the basis of collaborations from abroad, it is particularly noteworthy that the rate of return in India, as shown by a recent survey of foreign companies conducted by the Reserve Bank of India, has been around 15 to 20 per cent. A study, made by the US Department of Foreign Trade, has also testified that the profitability of joint ventures in India was around 16 per cent. The profitability of the Japanese concerns in India has been in the neighbourhood of 20 per cent, and significantly higher in certain cases.

New fields for expansion of industrial collaboration between India and Japan for the establishment of industries in India include sectors such as electronics, chemicals, synthetic fibres, plastics, synthetic rubber, trawlers and canning ships for deep sea fishing, mechanised farming equipment and sophisticated engineering goods. It was recognised during the deliberations of the Conference that there was now hardly any room in India for turnkey projects, as the country has developed adequate indigenous equipment, designs and managerial skills. There is, however, considerable scope for collaboration in the field of technical know-how and consultancy services which can be utilised by the two countries together for turnkey jobs in developing countries of Africa, South-East Asia and Latin America.

TRADE COLLABORATION

Trade relations between India and Japan have been in existence for almost about a century. Till recently, the trade between the two countries centred on the export of raw cotton by India in exchange for Japanese textiles. Japan's share in India's total exports in 1951 was only about 2 per cent. It has since been steadily rising and assumed a significant proportion of 11 per cent in 1967-68. Likewise, Japan's share in India's total imports has increased from about 1.5 per cent in 1951 to 5 per cent in 1967-68.

The growth in Indo-Japanese trade has partly been a reflection of the complementarity of their economies, for India imported from Japan capital goods such as machinery, iron & steel, chemicals, fertilisers, synthetic plastic materials, synthetic fibres and transport equipment, in exchange for its raw materials, including iron ore, raw cotton, mica, manganese, iron & steel scrap, and sheep casings. This pattern of trade suited both the economies when Japan was mainly a producer of light manufactures and India a supplier of raw materials. The recent developments in the economies of the two countries have brought about a shift in Japan towards capital-intensive, heavy and chemical industries, and in India towards the growth of labour-intensive, light and semi-heavy industries. These developments necessitate a revision in the pattern of Indo-Japanese trade.

The structural changes, which have emerged in the trade patterns of India and Japan in the recent years, were recognised in the deliberations of the Round Table Conference. It was felt that there was great scope for expansion of areas of complementarity and cooperation in trade to the mutual advantage of both the countries. The problems of bringing about closer collaboration in trade between India and Japan have to be considered in the light of the following factors relating to the changes in the Japanese economy and Indian economy:

- (i) There is significant increase in the imports of raw materials and agricultural products into Japan, related to the spectacular increase in its GNP.
- (ii) There has been structural change in Japan's domestic production, which has changed the pattern of its exports as well as imports. Whereas Japan was previously an important exporter of raw silk and cotton yarn, it is now an importer of these products.
- (iii) The Japanese industry is increasingly shifting to capital-intensive production of greater added value, and is moving away from labour-intensive operations of lesser added value. Growing labour shortage is contributing to the shift in Japanese industries.
- (iv) India has become a diversified economy, producing raw materials and agro-based products as well as industrial products of a wide variety. In a number of important industries such as railway equipment, power equipment, textile machinery, sugar machinery and cement machinery, India has attained self-sufficiency.
- (v) Whereas India has till recently been primarily an exporter of raw materials and agro-based products, it has now

embarked upon the exports of various types of manufactures, semi-manufactures and intermediates.

The increasing requirements of materials and labour-intensive production in Japan, and the continuously expanding requirements of capital equipment and machinery in India for the developmental programmes, are indicative of the expanding areas of complementarity and cooperation which need to be explored between the two countries. In the Round Table Conference, it was recognised that Japan, with its technological advancement in heavy industries and chemicals, should yield to India the opportunity for marketing light industrial products, semi-manufactures and intermediates, particularly those which are labour-intensive in operation. Corresponding adjustments in trading patterns should be effected between the two countries to enable these areas of collaboration to expand.

Japan has at present import surplus in its trade with India and export surplus in its trade with East and South Asian countries. India, on the other hand, has trade imbalance with South-East Asian countries, whereas it has export surplus with Japan. It was recognised in the Conference that this position should be utilised to the mutual advantage of both the countries by taking specific measures which would lead to requisite adjustments.

For promoting the expansion of trade collaboration between India and Japan, it is obvious that there is need for intensive studies of materials and labour-intensive production which can be supplied from India to Japan, and the determination of ways and means for the increase in the production of such materials in India with the assistance of Japanese technology and equipment. Certain development-cum-import studies have recently been made in Japan for exploring the avenues of development of materials on production-sharing basis. It would be of advantage to both the countries to follow up these studies and to effect greater dissemination of information about these.

FINANCIAL COLLABORATION

Since 1958, when Japan joined the Aid India Consortium, it has provided \$472 million towards government-to-government loans and \$226 million as supplier's credit. These have been of great benefit. The establishment of a number of Japanese-aided projects, including fertiliser projects, alloy steel plant, chemical plants and power projects, has strengthened India's economic potential. For Japan, these loans have been valuable for increasing direct exports and also for projecting the image of Japan as an exporter of sophisticated plants and equipment.

It is a matter of considerable concern, however, that over the years the Japanese aid to India has progressively been declining. India's share in Japan's total disbursements was 10.2 per cent in 1966 against the corresponding figure of 31 per cent three years earlier. There has also been a decline in absolute terms. The deliberations of the Round Table Conference indicated that this unfortunate trend was considerably associated with certain apprehensions in Japan about the soundness of Indian economy. Apprehensions were expressed about India's ability to repay in view of its requests for refinancing and re-scheduling of loans, its heavy reliance on foreign aid and certain factors of slow-down in the economy. The opportunity was taken in the Conference to remove these misapprehensions. It was emphasised that it was not correct that India relied more and more on foreign aid. In fact, 4/5th of India's total investment was met from its own resources, and it was only for 1/5th of its requirements that India depended on foreign assistance.

There has been greater recognition of enlarging the area of non-project aid for India. Indian economy has reached a stage of industrialisation where its requirements of materials and spare parts, etc., can be met through non-project aid. It is high time that the negative approach of developed countries towards non-project aid should change, because tied aid is inevitably considered as a medium of export promotion on the part of the aid-giving countries. It does not, however, imply that India does not require project aid. There is great need for expansion of investments in the fields of fertilisers, electronics, petro-chemicals, etc. Technological revolution has also started coming about in the Indian agriculture. These developments open up new avenues for project as well as non-project assistance.

Opportunity was taken in the deliberations of the Round Table Conference to define certain areas of financial collaboration between the two countries. The projects, which would help to develop India's exports of raw materials to Japan and which would help India to earn foreign exchange, are obviously very desirable for financial assistance. Development of labour-intensive products, which would be specially suitable for the Japanese market, offers opportunities for mutually beneficial collaboration. Development of port facilities in India, which would be profitable to both the countries, is another area where the repayment of loans could be linked with export earnings emanating from the production developed with the help of assistance.

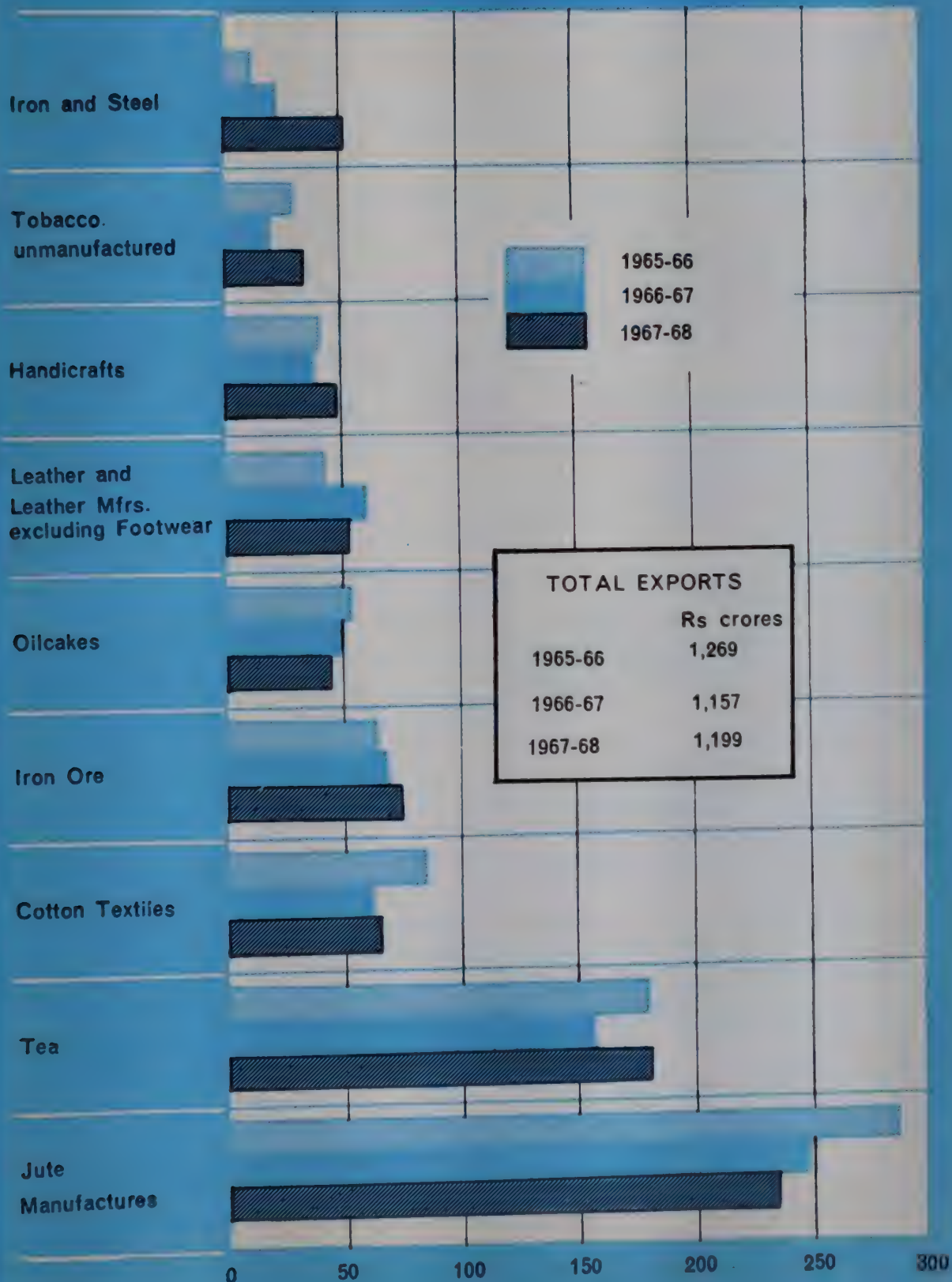
It will be seen, thus, that there is vast potential for the expansion of Indo-Japanese collaboration in the fields of industrial

development as well as trade expansion. The free and frank discussions in the recent Round Table Conference have shown the directions in which the scope of expansion of collaboration can be further explored. The various decisions taken at the Conference will need to be effectively followed up both in India as well as Japan. The events following the Round Table Conference are indicative of the increasing interest that is being taken in both countries for promoting better climate for expansion of the Indo-Japanese cooperation. Japan's decision to free its imports almost completely within two or three years, and to switch over from a foreign aid policy centred on aid to South-East Asia to an overall Asian programme that includes India, is a welcome development. There is evidence of increase of interest in the purchases from India of commodities like salt, shrimp, raw cotton and cotton yarn. These various facts show that the climate for fruitful collaboration between the two countries is getting more and more favourable.

INDIA'S FOREIGN TRADE INDICATORS

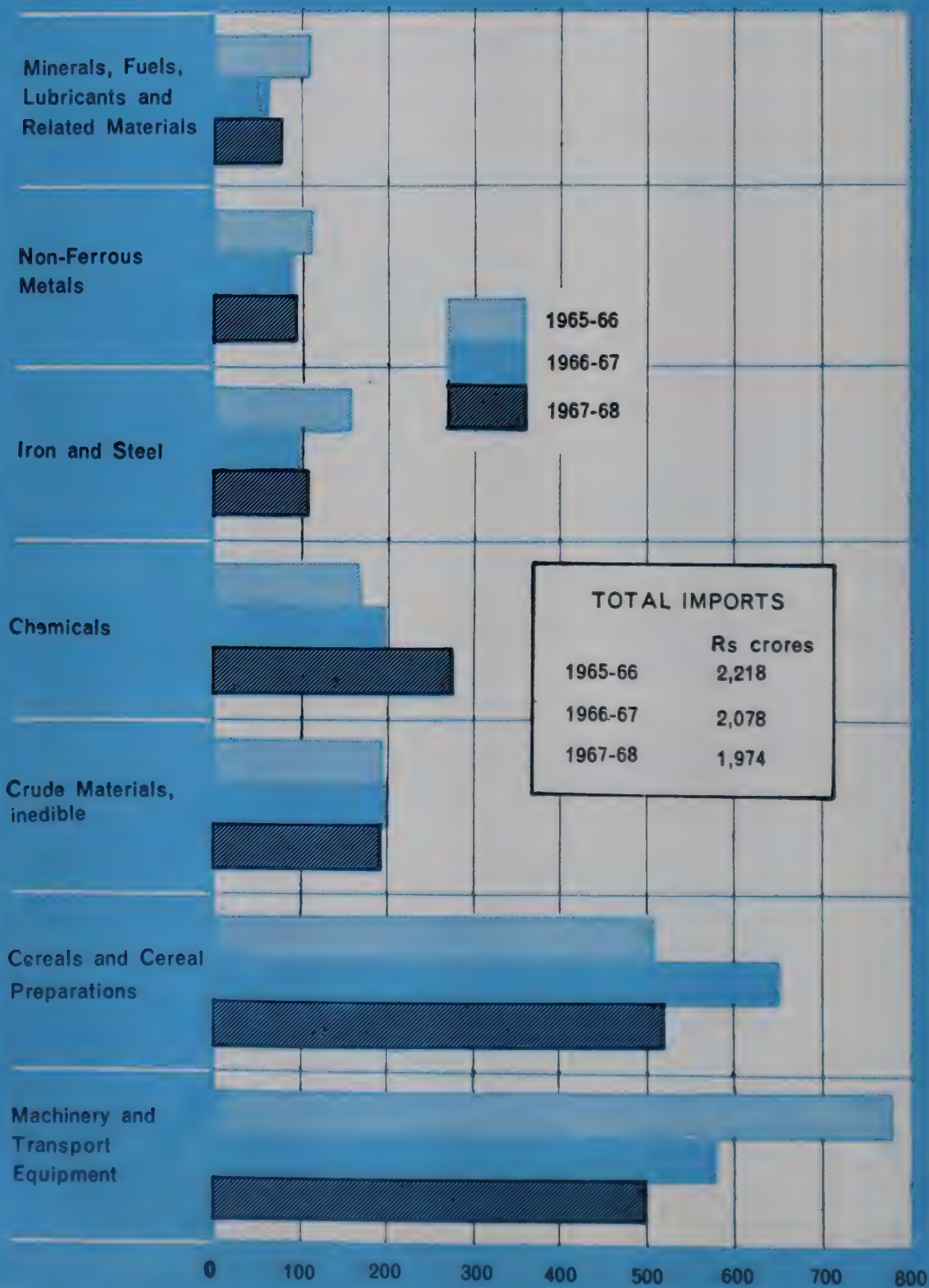
INDIA'S EXPORTS OF SELECTED ITEMS

Rs crores (Post-devaluation)



INDIA'S IMPORTS OF SELECTED ITEMS

Rs crores (Post-devaluation)



INTERNATIONAL BUSINESS ASSISTANCE BY STATE GOVERNMENT IN FEDERAL SET-UP*

By Gerald Albaum

THROUGHOUT the United States, business firms in increasing numbers are looking to international markets as a potential source of increasing sales and profits. In addition, an increasing number of firms are using overseas areas as supply sources. To many companies such action is necessary for growth, for others it is necessary for survival, while for still others it is probably not necessary at all.

During the 1960's business firms interested in international business have witnessed the development of a "new" source of assistance to them—*state government*. Increasingly, state governments in the United States have been promoting international business activities by business firms domiciled within the boundaries of their political jurisdiction by providing a variety of services designed to aid such firms. In addition to providing assistance to business firms already engaged in some type of international business activity, state governments are attempting to use their assistance programmes as a vehicle for encouraging other firms to enter this field of business for the first time. Although this movement is not new *per se*, the first state government programme having been started over 20 years ago, it has been during the current decade that state government involvement in international business has shown dynamic growth and has begun to "come of age".

The international business assistance programmes of state governments have reached the point where the parties concerned must give serious attention to the question of what should be the role state government is to play. Most state governments feel they have a role to play in developing international business activities by business firms domiciled within the boundaries of their political jurisdiction. However, a question can be raised as to whether these governments have really *thought out* the role to be played by them and what should be the limits of their activities. Available evidence suggests that some of those state governments that have

*The material in this article has been adapted from a more comprehensive study. The author wants to thank Professors M. Venkatesan and George Simmons, both of the University of Massachusetts, for their many helpful comments and suggestions on earlier drafts of this article.

already developed international business assistance programmes have done so in an "impulsive" way and, thus, the observed growth in this type of government activity generally has been random rather than systematically planned. There appears to be a role to be played by such governments, but since the observed movement is still in its formative stages, the role has not been well conceptualised.

A necessary starting point for formulating this role is an appraisal of what has been accomplished to date, in terms of both actual performance and the underlying reasoning behind the involvement of state governments. Such an appraisal is the purpose of this article. Information was gathered from government officials in all 50 states and Puerto Rico, and from a sample of actual or potential users of such state government services in two of the most highly industrialised states—Illinois and Ohio.¹ In both instances, a mail questionnaire was used as the primary research instrument.

NEED FOR STATE GOVERNMENT ASSISTANCE

The Federal Government makes various types of assistance available to the business firm engaged in international business activities and to the firm desiring to enter this field of business for the first time. The many different activities performed range from the collection and dissemination of information to almost outright subsidy of exports or government monopoly of international marketing activities. Emphasis is most often placed on the exporting aspect of international business and sometimes on domestic investment by foreign companies. On the other hand, importing and overseas investment by domestic companies seem to get irregular attention depending upon national policy which is frequently dictated by the position of and future outlook for the country's balance of payments.

While promotion by the national government fulfils a need and serves a useful purpose, there is the possible limitation that assistance

¹The questionnaire was sent to 90 manufacturing companies in Ohio and 321 companies in Illinois, of which 61 were export sales organisations. This sample was selected randomly by the process of *systematic sampling* from each state government's published directory of business firms engaged in international business activities.

The questions asked respondents to indicate from a given list those international business aids provided by their state government with which they were familiar, those they have used, and finally their rating as to the importance they attach to each. Responses to the mail questionnaire were 36 per cent by the export sales organisations in Illinois, 39 per cent by the larger group of Illinois companies, and 45 per cent by the manufacturers in Ohio.

programmes may be general in nature and may not necessarily benefit any specific state unless, of course, it is so directed. Also, the general nature of federal government services requires that no partiality be shown to the business firms of any single state, particularly at the expense of firms in other states. Specific direction by the national government to a single state may occur only when a particular industry that is being promoted happens to be concentrated geographically or when an area is in an economically depressed condition. Yet, even where a geographically concentrated industry is being promoted internationally by the national government, such action, while of some benefit to a specific state, is not serving the entire state because there are many other industries and potential international businessmen located in the area who are not benefiting directly. In addition, even though some activities are designed to be of aid to any businessman, many do not make use of these aids because they are not aware that they exist or because of a reluctance to become involved in anything associated with or sponsored by the national government.² Thus, a so-called *local gap* appears to be created.

It is to fill this gap that state governments have developed programmes to aid business firms located within their boundaries. Where activated, the result of state government involvement *apparently* has been to make governmental promotion of international business more effective. For instance, J. Carter Miller (President of Carter Controls, Inc., of Lansing, Illinois) has said:

“State government’s role and interest in helping businessmen, particularly the heads of small and medium size firms, to realise more business and profits abroad cannot be underestimated. Much of our success in foreign trade is due to the fact that state government has offered its stature to open doors that previously may have been closed to us.”³

Whether such enthusiasm for state government assistance activities is widely shared or even justified remains to be seen.

STATE GOVERNMENT PROGRAMMES

By mid-1967, some type of international business assistance programme was in operation in all but six states in the United States

²This latter attitude may be directed towards all levels of government. Some businessmen prefer that various commercial and trade associations represent the business community in its development of overseas markets. Within the framework of private associations, members can exercise control over their activities.

³Quoted in Otto Kerner, “Midwest Accent on Trade”, *International Commerce*, Vol. 71, No. 9 (March 1, 1965), p. 3.

(including Puerto Rico). The extensiveness of these programmes ranges from many specific services or business aids provided to but one or two. Both long and short range programmes have been developed to tap foreign markets and grasp the many new opportunities available; these programmes are aimed at helping those already in international business as well as those to whom international business may be an entirely new venture. As in the case of federal government programmes, more state government programmes are directed towards the export phase of international business than any other phase. Also of varying importance, however, are tourism, capital investment by foreign business firms and importing in that order. Concerning size and type of business firm to which programmes are primarily aimed, the kind of company that appears to be most popular among state governments is of small size and engaged in manufacturing.

OBJECTIVES SOUGHT

Although state governments' international business aids are available to all types of business firms, more individual programmes are aimed primarily at the *small manufacturer interested in exporting* than at any other type of firm. To ascertain more specifically why these programmes are being developed, state government officials were asked to specify just what they were trying to accomplish by offering international business aids. Their answers indicate that the reason state governments have found it beneficial to promote international business is precisely the same reason underlying federal government promotion—officials want business firms within their political jurisdiction to increase the volume of their business so that increases in employment and income would result. To illustrate, it was estimated by officials of the state of New York in 1964 that a 10 per cent increase in the state's annual exports (nearly \$2 billion at the time) could provide 50,000 new jobs in manufacturing and service industries.⁴ Similarly, it has been estimated by the International Commerce Committee of the Michigan State Senate that "with any semblance of imaginative, forceful promotion and leadership, Michigan's present export-total of \$2.6 billion can realistically be increased by \$150 million annually. This can mean 5,000 new jobs each year..."⁵ Thus, the basic objective—whether implied or stated explicitly—is *economic and industrial development and growth through greater exports*.

⁴Stanley Lichtenstein, "States Win Export Laurels", *International Commerce*, Vol. 70, No. 22 (June 1, 1964), p. 2.

⁵International Commerce Committee of the Michigan State Senate, *Michigan in World Trade* (Lansing, Michigan, 1967), p. 4.

SERVICES PROVIDED

State governments engage in a wide variety of activities in order to promote international business, ranging from information collection and dissemination to almost direct involvement in individual business transactions (see Table I). The three forms of assistance most popular among state governments are: (1) participating in conferences and seminars, (2) organising

TABLE I
INTERNATIONAL BUSINESS AIDS PROVIDED
BY STATE GOVERNMENT

<i>Business aids</i>	<i>Number of states providing the aid*</i>
Participate in, but not sponsor, conferences, meetings, seminars, etc., for state businessmen	31
Organising trade missions to foreign markets	29
Circulate on a regular basis any inquiries received from abroad	28
Sponsor international business oriented conferences, meetings, seminars, etc., for state businessmen	25
State exhibits or displays in international trade fairs and shows	25
Maintain a permanent file on trade leads	24
Establish and publish a directory of state business firms engaged in international business activities	24
Develop pamphlets and other printed materials designed to aid businessmen interested in international business	22
Advertising in overseas market media	14
Perform research projects on foreign markets	13
"In-plant" consultation	12
Assistance in performing the mechanics of exporting (e.g., documentation)	9
Direct mail advertising	8
Sponsor research projects conducted by other organisations	6
Operating promotional offices in foreign countries	6

*Based on programmes in operation in 45 states.

trade missions, and (3) circulating regularly inquiries received from abroad; the least popular activities are operating promotional offices overseas and sponsoring research projects carried out by other organisations.

There are some explanations for this situation. In the first place, *cost* is important. Although state government officials want to offer as comprehensive a programme as possible, they have to operate with limited budgets. As will be shown later, not all states have a specific annual budget for promoting international business, and of those states having such a budget in one-half of them less than \$50,000 per year is being allocated to the programme. Overseas promotional offices and sponsoring research projects that others perform are costly activities whereas the cost to a state government of the three aids most popular among state governments is usually not too great. Secondly, the question of possible *duplication* of—and thus need for—certain services could be involved. With regard to overseas offices, the United States Government operates, as do most national governments, an extensive system of consulates and embassies that can provide assistance. In addition, certain port authorities in the United States have overseas offices as do “American chambers of commerce abroad”.⁶ As far as sponsoring research is concerned, many states have their own research staffs and in addition, much information available from other sources such as the federal government and various private organisations. On the other hand, while the federal government—and sometimes even private groups—organise trade missions and circulate inquiries received from abroad, these activities are general and not necessarily aimed at helping business firms located in a specific area.

AN APPRAISAL

Since most state government international business assistance programmes are relatively new, any appraisal at this time of the effectiveness of such programmes may be unfair in that perhaps not enough time has elapsed to provide sufficient evidence. Consequently, the best that can be hoped for is to gain better insight into the problem.

⁶An “American chamber of commerce abroad” is a voluntary association of American enterprises and individuals doing business in a given country, together with firms and individuals of that country doing business with the United States. Most of these organisations are affiliated with the Chamber of Commerce of the United States. For a more complete discussion of these organisations, see Chamber of Commerce of the United States, *Activities of American Chambers of Commerce Abroad* (Washington, D.C., 1965).

Unfortunately, there is no direct evidence available on whether the basic underlying objective of economic and industrial development is being achieved. This is to be expected because the process of economic growth and development is the result of many forces and the task of isolating and measuring the impact of a single variable (e.g., a state's international promotional effort) is extremely complex. At best, there are some data concerning general awareness and usage of individual state services by business firms, and hopefully, there is a direct relationship between awareness and use and achievement of the basic objective. In addition, there are reported in the literature some results of specific activities such as trade missions, trade fairs, conferences, and so forth.⁷ However, since these are results of individual cases they serve only as illustrations of what can be done. Take trade missions as an example. There are specific results reported on the amount of export sales generated from an individual mission, or the number of new distributors or agents appointed, or the number of proposals brought back, and so forth.⁸ Another example is state exhibits in international trade fairs. At the 1965 Tokyo International Trade Fair, business firms from the state of Washington that exhibited in the state's pavilion brought back \$2,000,000 in definite orders.⁹ As the basis of generalisations such reports are not very useful. About all that can be said is that these state government activities appear to show some positive results.

In interpreting the following comments the reader is cautioned to remember that the available information is one-sided, and because of this true value cannot be assessed. While we may know the results of some specific activities in individual states, we do not know the cost that was incurred to obtain these results. Consequently, until both the "revenue" and "cost" dimensions can be determined, any answer that can be given to the general question "is it worth it?" is at best, only a tentative indication.

⁷See, for example, "States Take a Stab at Salesmanship", *Business Week*, February 18, 1967, pp. 71ff; Lichtenstein, *op. cit.*, pp. 2-6; Kerner, *op. cit.*; Senator Gilbert E. Bursley, "New Rivalry for World Markets", *The Michigan State Economic Record*, Vol. 1, No. 5 (May 1967), pp. 1-2ff; and International Commerce Committee of the Michigan State Senate, *op. cit.*

⁸See Richard E. Stanley, "Stimulating State Economic Growth Through State-Organised, Government Approved Trade Missions", *Business and Economic Review*, The University of South Carolina, Vol. XIV, No. 2 (November 1967), pp. 3-6.

⁹"Washington State Fair Pavilion Stays in Asia, Ready for Reuse", *International Commerce*, Vol. 73, No. 19 (May 8, 1967), p. 11.

AWARENESS AND USAGE

Essential basic ingredients to the success of any type of aid programme are: (1) the people to whom the programme is directed know that it exists and what its many facets are, and (2) the intended recipients use the available services. The majority of state government officials indicated to this author that the reaction of businessmen to the international business assistance offered them by their state government has been generally that of at least "substantial interest and use", as shown in Table II.

TABLE II
REACTION OF BUSINESSMEN TO INTERNATIONAL
BUSINESS ASSISTANCE PROGRAMMES

<i>Reaction</i>	<i>Per cent of states indicating reaction*</i>
Disinterest and little use	7.9
Moderate interest and use	26.3
Substantial interest and use	42.1
Very great interest and use	18.4
Too early to tell	5.3

*Based on replies from 38 states.

The results of the survey of business firms in the states of Ohio and Illinois *do not support* this rather optimistic belief of government officials from most states, including their own.¹⁰ As shown in Table III on p. 419, both awareness and use of international business aids are very low, except for the export sales organisations in Illinois. This finding is perhaps even more devastating than it appears because the sample of firms surveyed was drawn from directories listing companies that are engaged in overseas marketing or have exportable products and are interested in selling their products overseas. The relatively high awareness and usage figures for the export sales organisations in Illinois are also interesting because

¹⁰Admittedly, these two states do not constitute a statistically representative sample of the United States. However, since they are leading industrial states, the experience there can provide meaningful insight.

TABLE III
 AWARENESS AND USAGE OF STATE GOVERNMENT
 INTERNATIONAL BUSINESS AIDS

<i>State</i>	<i>Awareness (per cent)</i>	<i>Usage (per cent)</i>
Ohio ¹	37	15
Illinois		
Export sales organisations ²	82	59
All other companies ³	32	16

¹Based on replies from 41 companies.

²Based on replies from 22 companies.

³Based on replies from 101 companies.

in developing their programmes state government officials have not been particularly concerned about these types of companies.

The relatively low absolute level of awareness and use by business firms suggests that state government officials might be overestimating the effectiveness of the various methods they are using to inform businessmen. Such methods as personal contact, direct correspondence, talks before business groups, and reports in the various print and broadcast media are being used. While it is not clear which methods are effective and which are not, there is an indication something is wrong. The reason might be budgetary. In almost all states, an extremely small share of the funds spent is being used to inform businessmen; the greatest share (generally at least 70 per cent) is going into actually providing assistance. Perhaps there is need to reassess the allocation of the budget; at the current stage of development a greater share could be expended on informing business of the existence and nature of the services available from their state government. On the other hand, it may not be the allocation that is at fault but a case where the size of the budget is not adequate to accomplish properly everything that is being attempted. If this is the case, then government officials would be well advised to "pull in their horns" and not try to offer all kinds of aids to all types of business firms.

IMPORTANCE ATTACHED TO STATE ASSISTANCE

Another dimension of appraising state government international business assistance programmes concerns the importance attached

to the various forms of aid by the parties concerned—state officials and businessmen. State government officials feel that the three most important international business aids that should be provided by state governments are organising trade missions, circulating inquiries, and maintaining a permanent file on trade leads. Do businessmen agree with state officials on what is important?

In attempting to provide some answers to this question, respondent business firms in the states of Ohio and Illinois were asked to rate the importance they attach to having their state government provide specified international business oriented services. The results are presented in Table IV on the next page, which shows the mean values of importance indicated by the group of respondents that are aware of at least some aspects of their state government's international business assistance programme. These data provide the basis for the following statements about the importance of state government international business aids.

In the first place, the absolute level of importance attached to the various aids by business firms is not generally as great as that of state government officials. While officials tend to think that what they are doing is important, businessmen appear to have a more neutral attitude towards importance and for some forms of assistance even a tendency for a somewhat negative attitude.

Secondly, when the relative importance of the various international business aids is considered, two observations emerge: (1) there is no uniform pattern within the three groups of respondents, and (2) there appears to be little agreement between state government officials and the respondent business firms. The latter observation is based on measuring by the technique of rank correlation analysis the extent of association between state government officials and each respondent group concerning relative importance.¹¹ The results of the rank correlation analysis, as shown in Table V on p. 422, indicate that the association between state

¹¹This method involves ranking the observations (specific business aids) on each variable—in this case “state government officials” and “business group”—and then correlating the ranks. The resulting measure of correlation, the coefficient of rank correlation (r_r), is obtained from the following formula:

$$r_r = 1 - \frac{6 \sum d^2}{N(N^2 - 1)}$$

where d is the difference between the two rankings of the same observation, and N is the total number of observations ranked.

TABLE IV

MEAN VALUES OF IMPORTANCE ATTACHED TO STATE GOVERNMENT INTERNATIONAL BUSINESS AIDS*

<i>Business aid</i>	<i>State government officials</i>	<i>Business firms familiar with the programmes</i>		
		<i>Ohio</i>	<i>Illinois</i>	
			<i>Export sales organisa- tions</i>	<i>Other companies</i>
Organising trade missions to foreign markets	1.43	2.33	2.81	2.53
Circulate regularly inquiries received from abroad	1.49	3.00	2.00	2.50
Maintain a permanent file on trade leads	1.58	2.86	2.00	2.45
Establish and publish a directory of state business firms engaged in international business activities	1.66	2.33	2.14	2.89
Sponsor international business oriented conferences, meetings, seminars, etc., for state businessmen	1.66	3.35	2.41	2.92
Develop pamphlets and other printed materials designed to aid businessmen	1.71	3.17	3.00	2.54
State exhibits or displays in international trade fairs and shows	1.79	2.66	3.33	3.29
Operating promotional offices overseas	1.96	1.66	2.13	3.33
Advertising in overseas markets	2.05	3.20	2.43	2.88
Provide market information on overseas market areas	2.16	3.50	2.75	2.53
"In-plant" consultation	2.24	2.00	3.00	3.37
Assistance in performing the mechanics of exporting (e.g., documentation)	2.39	4.25	2.33	2.54

*The range of possible values is 1 to 5, with the number 1 representing Very Important and the number 5, Not Important.

government officials and each respondent group is low.¹² There is no r_r that is significant at as high a level as that of .05.¹³

TABLE V
RESULTS OF RANK CORRELATION ANALYSIS
OF RELATIVE IMPORTANCE

<i>Respondent group</i>	<i>Coefficient of rank correlation (r_r)</i>	<i>t-test for r_r¹</i>
Ohio	.54	2.025 ^a (10)
Illinois		
Export sales organisations	.31	1.029 (10)
Other companies	.40	1.380 (10)

¹Numbers in parentheses are degrees of freedom.

^aSignificant at .10 level.

¹²It will be noted from the data in Table IV that in ranking the data there are some tied observations. Normally, ties exert a relatively insignificant effect upon the rank correlation coefficient. However, if the proportion of ties is large in either of the two variables, the effect may be to inflate the value of r_r , and a correction factor must be incorporated into the computation of r_r . Such a correction factor was applied to the ranked data and the resulting rank correlation coefficients did not differ significantly from those shown in Table V. Consequently, ties were ignored. For an explanation of how to apply this correction factor, see Sidney Siegal, *Nonparametric Statistics for the Behavioural Sciences* (New York: McGraw-Hill Book Company, Inc., 1956), pp. 206-210.

¹³In testing the significance of the rank correlation coefficient what is tested is whether or not the true value of this coefficient in the population might be zero. The t statistic is the measure used, and it is computed as follows:

$$t = r_r \sqrt{\frac{(N-2)}{(1-r_r^2)}}$$

where r_r is the coefficient of rank correlation and N is the number of ranks, which is interpolated in the Table of the t statistic with $N-2$ degrees of freedom.

Finally, the state government aids most important to business firms are *not* the same as those that are used most.¹⁴ This suggests perhaps that state government officials are not designing their programmes on the basis of need, with the result that some of the services most important to business, although provided, are being given too little emphasis and direction.

RESOURCE INPUTS

Whatever failing there might be on the part of state governments in providing international business aids is not entirely the fault of those actively working to promote international business. To a point, achievement of an output is directly related to the nature and amount of resource inputs. Generally speaking, the human and capital resources expended by state governments to implement their international business aid programmes are limited in amount (see Table VI on the next page), a condition that is recognised by the state government officials responsible for implementing these programmes.

Of the states reporting personnel data, over 60 per cent have less than four employees assigned to their international business promotion programmes while less than 20 per cent of the reporting states have more than ten employees engaged in such work. At the same time, a large number of states do not use a specific and separate annual budget. For those states using a specific budget, although the amounts range from \$5,000 to over \$700,000, in one-half of them less than \$50,000 is being devoted to promoting international business. The limited nature of the expenditures on these programmes

¹⁴In absolute terms, the forms of assistance used most are as follows:

Ohio

- Regular circulation of inquiries
- Sponsored conferences, meetings, etc.
- Market information
- Permanent file on trade leads

Illinois—Export Sales Organisations

- Directory of state business firms
- Sponsored conferences, meetings, etc.
- Market information
- Trade missions

Illinois—All Other Companies

- Directory of state business firms
- Market information
- Trade missions
- Assistance in performing the mechanics of exporting

TABLE VI
HUMAN AND CAPITAL RESOURCES COMMITTED BY STATE
GOVERNMENTS TO PROMOTE INTERNATIONAL BUSINESS

<i>Resource*</i>	<i>Per cent of states</i>
<i>Number of state employees engaged in promoting international business:</i>	
1—3	61.3
4—6	16.1
1—10	3.2
More than 10	19.4
<i>Size of Annual Budget:</i>	
Less than \$25,000	11.1
\$25,000—\$49,999	16.7
\$50,000—\$99,999	11.1
\$100,000—\$249,999	11.1
\$250,000—\$499,999	2.8
\$500,000 and above	2.8
No specific budget	44.4

*Personnel figures based on replies from 31 states; budget figures based on replies from 36 states.

becomes more evident when it is realised that there are two general uses for these funds: (1) performing the services, and (2) informing business firms about the services provided.

The personnel and budget data seem to suggest that some state governments have not yet fully committed themselves to promoting international business. Perhaps this is a wise approach. For any new programme it is reasonable to expect that full commitment comes only with experience gained over time, and that it is better to start out slow and probe around rather than jump all at once. Certainly this is sensible for the smaller, less wealthy state government.

IMPLICATIONS AND CONCLUSIONS

This article examines the efforts of state governments to promote international business, and provides some answers to certain questions. Given the ever increasing role of government into all phases of contemporary life, it seems reasonable to assume that some form of state government promotion of international business is here to stay. However, as pointed out at the beginning of this article, while most state governments feel they must do something to stimulate international business activities by business firms domiciled within the boundaries of their political jurisdiction, these governments have not really thought out what role they should play and what should be the limits of their activity. In addition, there appears to be some evidence suggesting that in individual cases purely political considerations have been the driving force behind the offering of some of the services. While not necessarily bad, such considerations can be dangerous, because what is politically desirable often is not economically and socially desirable.

In developing their present programmes, state government officials seem to be making the following assumptions: (1) companies need international markets, and (2) companies really want to do business abroad. Presumably, this is related to the long-run value of following the so-called "marketing concept", and that the realities of the market place dictate that a multinational outlook is essential for long-run survival and growth. Yet, the opportunities for smaller-sized companies may not be as good as things appear. International business is not a panacea, as many seem to believe. A company must first solidify its domestic base before broadening its horizons to include international business activities. Moreover, it is not necessary or even desirable that certain companies ever expand abroad. Apparently state governments have not recognised this.

The objective of economic development and growth through greater participation in international business activities is admirable and definitely respectable. Certainly, some companies have to be shown not only the opportunities for profits in international business, but also certain services have to be brought to them. But the services must be those business firms want and need. In this context, consideration must be given to possible duplication of services already available from other sources. Many respondent business firms made unsolicited statements to the effect that they believe state government is duplicating services already provided by the federal government and certain trade and industry groups. Of course, it also becomes incumbent upon business firms to make their needs known to the appropriate government officials.

The feasibility or advisability of state government assistance programmes depends upon the interest and cooperation of local business groups as well as upon the benefits to the local economy and possible costs involved. For example, a study of the attempt to stimulate exporting in the Hartford, Connecticut, area among 35 selected companies (mostly small in size) concludes that "efforts to stimulate exporting by leading non-exporting firms literally 'by the hand', including firms with or without exporting potential and firms large or small, produce only limited results either in terms of new volume of exports or numbers of new exporters."¹⁵

What does the future hold for state government assistance? There will be some changes in emphasis and an increase in incidence of certain activities. For example, establishing overseas offices seems to be prominent in the future plans of many states. Another future development may be a change in the nature of inter-state cooperation. So far this has been limited to exchanging or providing information, publications, etc. Yet, there is no inherent reason why such cooperation should be so limited. For certain states, especially smaller, less international-oriented states, there may be great value in promoting international business on a joint venture basis. To illustrate, the Industrial Development and Promotion Departments of the states of Arizona, Colorado, New Mexico, and Utah sponsored a Four-State Trade Mission to Mexico, in early 1968. Coordinated by the state of Arizona, the instigator of the venture, the trade mission was a mobile trade caravan lasting four weeks. This unique venture deserves the attention of other state governments and business firms, as the experience should provide some empirical insight into the value of multistate efforts to promote international business.

Unfortunately, the dynamic nature of this phenomenon makes it dangerous to predict more specifically at this time the future direction that will be taken. There is, however, one gap that it appears will not be filled—specific programmes to aid importers have not been developed. Like the national government, state governments do not seem to recognise importing as a phase of international business worthy of their efforts. This is unfortunate because if state government's role is to be supplementary, then this is one area where they can be of great help. Moreover, aiding importers is not inconsistent with the goal of economic development, because in some cases employment can be created or at the very least unemployment prevented. If a company is to survive and expand, it must know all alternative sources of inputs, not just

¹⁵Paul Weiner and Michael Krok, *A Study of the Attempts and Results of Directly Stimulating Exports* (Boston: Federal Reserve Bank of Boston, Research Report No. 38, March 1967), p. 7.

those available either elsewhere in its own state or elsewhere within the United States. Thus, a state government interested in developing industry within the state should not be concerned whether the items imported come from out-of-state domestic companies or from companies located in foreign countries. Until this phase of international business is serviced, "local" governments must be considered as doing an incomplete job.

Finally, there is some evidence beginning to appear suggesting that an element of interstate competition is behind the planning of some state governments. While not inherently bad, such rivalry may become an end in itself. The danger here is that the business firm becomes a pawn in the battle of state governments. In promoting international business interstate rivalry will always be present to a certain extent in the planning and implementing of programmes. However, state government officials should remember that their primary duty is to aid business firms, not engage in "one upmanship" type competition with other states.

A CRITIQUE ON MARKETING OF INDIA TEA IN THE UNITED STATES*

By Jagjit Singh

THE MAIN purpose of this article is to provide a case history of the problems of marketing goods by underdeveloped countries to economically advanced countries. The example dealt with here is the marketing of India tea in the United States. Therefore, the article would be found useful to those readers, whether working in a government department or a private organisation, who are deeply involved in helping developing countries or companies do a successful job in accelerating exports to developed countries.

India is the world's largest producer and second largest exporter of tea. Tea is also India's second largest export-earner, accounting for about 14 per cent of its total export earnings.

Although the United States per capita tea consumption has remained relatively constant, imports from India, in absolute money terms, fell to less than half in 1967 as compared to 1955. In the wake of such a substantial loss in export earnings, it is necessary to have a closer look at the market structure and at the marketing practices followed in the trade.

It is with this end in view that this article analyses critically the factors that have led to a decline in India's share of the United States tea market. It is hoped that the analysis will serve as a pilot study for other industries in India as well as in other countries interested in exporting their products to the United States.

The paper includes: history of the Indian tea industry; structure of the industry both in India and in the United States; history and methods of advertising and promotion of tea; methods used in promoting competitive beverages and substitutes; results of a tea trade survey conducted for this study; and suggested improvements in both structure and methods for marketing India tea in the United States.

HISTORY OF INDIAN TEA INDUSTRY

Both China and India claim to have had the first wild tea bushes in the world. Descriptions of tea appear in many languages

*This article is based on the author's unpublished Ph.D. dissertation submitted to the University of Nebraska, College of Business Administration, USA, in 1964. It has been updated, wherever possible.

and known records date back to 2,737 BC. There is no doubt, however, that the knowledge of the existence of the tea plant in Assam for purposes of commercialisation must go to Major Robert Bruce of the British army. Later, due to lack of interest on the part of the East India Company, it was left to private enterprise in India to produce tea on a commercial scale.

The Assam Company was formed in London in 1839 without any government support and was later to prove the only premier tea company of India. It, however, did not take very long for rival companies to be formed. During 1861-65, twenty new companies came into the picture, eleven of which were registered in London. Competition in the trade grew very fast even in the absence of regular transportation means and skilled labour.

Between 1839 and 1889, tea was planted in 310,595 acres in India, following which production of tea rose rapidly. In 1903, India outranked China by becoming the world's largest supplier of tea, a position it maintained till mid-'sixties. Now, India is world's second largest exporter of tea. In 1967, India produced 843 million lbs. of tea. It is observed from Table I that increase in the production of tea in India during 1951-67 was of the order of 28 per cent.

TABLE I
PRODUCTION OF TEA IN INDIA
1931, 1941, 1951 AND 1961-67

(In million lbs.)

<i>Year</i>	<i>Quantity</i>	<i>Index of production</i> (1961=100)
1931	394	50
1941	500	64
1951	629	80
1961	781	100
1962	764	98
1963	764	98
1964	821	105
1965	808	103
1966	830	106
1967*	843	108

*Provisional.

SOURCE: *Tea Statistics (1967-68)*, issued by the Tea Board, Calcutta.

Today, tea is grown in both the northern and the southern parts of India in widely varying elevations, soil conditions and climates. Assam and West Bengal in 1967 accounted for 78 per cent of the total area under cultivation and 74 per cent of the total output of tea.

In 1953, 80.4 per cent of tea estates were of the size of 100 acres or less, which is considered to be uneconomic, and were exclusively owned by Indians (Table II on p. 431). The majority of the tea estates suffer from inefficiency, under-employment of labour and high costs of production, mainly because of the uneconomic holding size.

In addition to earning substantial foreign exchange, the tea industry provides revenue to state governments and full-time employment to about one and a half million people. It generates economic activities in various ancillary industries such as plywood, ceramics, coal, cement, fertiliser, tea machinery and shipping.

Behind the phenomenal growth of tea industry in India, there is the remarkable story of a century of steady and continuous endeavour in experiments and research in agricultural practices, in the techniques of management, in countering pests and diseases, in tackling the problems of essential supplies and transport, and in timely and adequate provision of finance. But this kind of thinking and efforts apply to only the production of tea and not, unfortunately, to its marketing.

STRUCTURE OF THE INDUSTRY

In order to describe the composition and functioning of the Indian tea industry, we shall deal with the following three aspects:

- (1) Production and marketing structure in India,
- (2) marketing structure in the US, and
- (3) competitive aspects of the industry in the US.

PRODUCTION AND MARKETING STRUCTURE IN INDIA

Production

The two regions producing tea are the north and the south. It is a seasonal crop in the north due to climatic conditions while it is produced throughout the year in the south. The quality of tea produced in the different months varies. It may be noted that India has an edge over both Ceylon and Indonesia in tea production with regard to the length of harvest time for high quality tea. During the eleven months of tea harvesting, India produces the

TABLE II
NUMBER AND ACREAGE OF TEA ESTATES, BY SIZE AND BY
NATURE OF OWNERSHIP, INDIA, 1953

Size (in acres)	Indian*			Non-Indian**			Total (Indian & non-Indian)		
	Est. no. of estates	% of total	Area (acres)	Est. no. of estates	% of total	Area (acres)	Est. no. of estates	% of total	Area (acres)
Below 100	5,283	80.4	32,835	—	—	—	5,283	80.4	32,835
101-300	340	5.2	64,000	25	0.4	5,677	365	5.6	69,677
301-500	166	2.5	65,000	89	1.4	35,842	255	3.9	100,842
501 and above	146	2.2	115,000	520	7.9	469,161	666	10.1	584,161
TOTAL	5,935	90.3	276,835	634	9.7	510,680	6,569	100.0	787,515

Classification of ownership:

*Indian-rupee companies controlled by Indian managing agents. Rupee Public Ltd. Co., with Indian board of directors. Rupee Private Ltd. Co., with Indian board of directors. Indian proprietary and partnership concerns.

**Non-Indian-sterling companies. Rupee companies controlled by non-Indian managing agents. Rupee Private Ltd. Co., with non-Indian board of directors. Non-Indian rupee and sterling proprietary and partnership concerns.

NOTE: Further data on the subject not available.

SOURCE: Government of India, New Delhi, *Report of the Plantation Inquiry Commission*, Part I—Tea, 1956.

finest quality of tea seven months in the year as compared to five months in Ceylon and three months in Indonesia.

Most of India's tea production takes place in the north, and this concentration is a disadvantage to India in the world tea market, because climatic conditions make it a seasonal industry. Efforts are being, however, made to offset this disadvantage.

Marketing in India

There are basically two levels in the marketing of India tea. First, there is sale in bulk by the producer either in the country of origin or in one of the world markets such as London and Amsterdam. Second, the buyer blends, packages and distributes tea to retail stores. In some cases, the buyer-blender-packer-wholesaler, all rolled in one, also owns tea estates, which are generally run as private companies, but even then it is generally preferred to sell the product of the estate at auction centres. It is believed in the tea trade that auction sales fetch the product its true value in competition with other teas in its class.

(a) *Auctions in India:* After tea has been processed and packaged in chests at the garden or estate, the estate manager sends it to the garden's selling agent in Calcutta (or Cochin in case of South India teas) who, if the company is controlled from London, acts on instructions received as to its disposal. The tea then goes to the bonded warehouses.

There are five major brokerage firms or auction companies in Calcutta, which exercise a close control over the sales operations of their customers by allowing them credit facilities. Complaints have been filed by both the buyers and sellers of tea at Calcutta with the Government of India concerning this unusually strong position occupied by the brokers.

The Plantation Inquiry Commission found the situation extremely unsound and recommended that the Tea Board should assume the function of regulating sales of tea. Now, Tea Board has the overall authority of formulating plans and adopting policies affecting production and marketing of tea in India.

(b) *Auctions in London:* Tea, after being despatched by the estate manager to the local port, is consigned to the representative of their firm in London. When the consignment reaches London docks, it is put into bonded warehouses and is, in due course, put up for public auction by selling brokers. The selling brokers as well as the intending buyers draw samples from each chest, which they taste and evaluate, and by the day of the sale both have formed their opinions of the value of the tea.

Although the auctions are public and normally any one can bid, all purchases are made through buying brokers. These buying brokers resell the tea later on behalf of their clients to dealers, blenders and merchants.

(c) *Direct Sales*: Direct selling forms but a small part of the total sale of India teas. These sales are made directly to buyers in any of the consuming countries such as the United States, probably through a selling agent there dealing with the producer's representative in Calcutta. Not many buyers, however, take this risk especially when large varieties and abundant supply of teas are available in the world.

Trade Associations and Government Service Agencies

The Indian Tea Board at Calcutta is an autonomous body of the Government of India constituted to control and direct production, marketing and promotion of India tea. The two regions of north and south India have also their respective grower and trader organisations. Prominent among them are:

- North India: 1. The India Tea Association
- 2. The Calcutta Tea Traders' Association
- South India: 1. The United Planters' Association of Southern India
- 2. The South Indian Association.

These organisations are responsible for a variety of activities like recruitment of labour, development of home and foreign markets, regulation of tea exports, scientific research and, in general, promotion of the interests of the producers, sellers and buyers.

These trade associations and government agencies are supposed to work hand-in-hand with each other and thus aim at benefiting Indian tea industry as a whole.

MARKETING STRUCTURE IN THE UNITED STATES

The United States does not produce tea and so imports all its requirements of the commodity from India, Ceylon, Indonesia and other countries.

All tea arriving into the United States remains "in bond" and cannot be used until samples are drawn and the shipment is released by the United States Tea Examiners after thorough testing for quality against the government standards established each year. All tea enters the country duty-free. The only charge levied is $1\frac{1}{2}$ per cent per 100 lbs. paid by the importer to cover the cost of tea inspection.

Following are the main characteristics of tea that have some marketing significance although the ability to detect them is not possessed by an average tea buyer in the United States: quality, appearance, colour, strength, pungency, flavour and infusion.

New York is the principal port of entry for tea and the second tea market of the world in point of volume. The other principal US tea markets are Boston, Seattle and San Francisco.

Trade Channels: After reaching the various ports in the United States, the distribution of tea within the country is relatively complex. For example, if tea is brought into the United States by a mere importer, he may sell it to a packer, to a wholesaler, to a retail store or a supermarket, or to the ultimate consumer by direct mail. Tea may also be imported by a tea packer-distributor or a chain grocery packer for distribution or sale in its own food stores in the country.

Figure I on the next page shows the various trade channels through which tea passes from the producer in India to the ultimate consumer in the United States.

Wholesaling of Tea: Wholesaling of tea in the United States is in the hands of tea importers, jobbers or other forms of middlemen. There are around 1,000 tea wholesalers in the United States who could be counted as packers, but the bulk of the package tea is sold by a few national distributors plus the large chain stores.

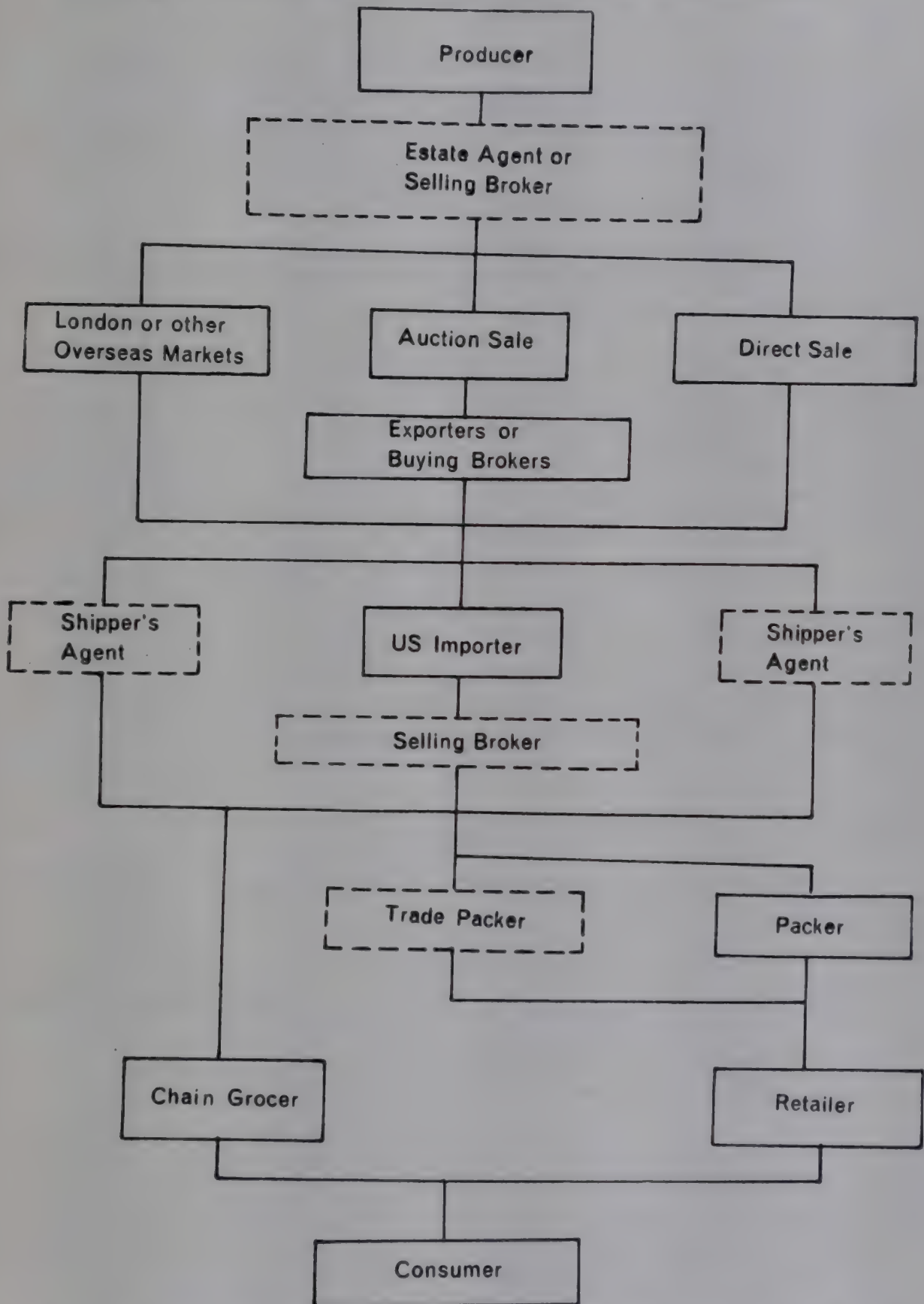
There are also some large importers of tea who only import, but do not pack, and distribute. Many wholesalers have their teas packed for them by trade packers.

There are two types of tea packers in the United States. First, there are packers who specialise in packing tea for the wholesalers. They are called trade packers. Second, there are packers who pack their own tea for distribution under their own private labels.

No matter who imports tea, it is the packer who also does the blending in most cases. Also, it is here that there is the concentration of a semi-monopoly or oligopoly power in the industry. In 1961, seventy-nine per cent of the US tea market was controlled by four large packer-distributors, so the use of India tea or any other tea or teas in a blend and their import into the United States are controlled by the packer. In some cases, blends are also made up by the importer and offered to packers.

Retailing of Tea: There are innumerable brands of tea sold in the country whether it is loose tea in packets, tea bags or instant

Fig. 1 — INDIA TEA—FROM ESTATE TO US TEAPOTS



Source: Adapted from *Tea and Coffee Trade Journal*, June 1955, p. 52.

tea. In most cases, mention is never made as to the original home of the tea.

The average consumer in the United States, according to a survey conducted by McCormick and Company, is unable to distinguish one tea from another. This is because a single brand of tea may contain anywhere from a few to forty different teas from the various estates and producing countries.

According to an estimate of the *Tea and Coffee Buyers' Guide*, there are about 1,500 different types of tea and over 2,000 possible blends of tea available in the world.

Commercial grades such as Orange, Pekoe, Pekoe and Cut Black are the ones most commonly used by packers, but these grades have no significance to the ultimate consumer. "It is not possible to give a strict definition of any grade because no standards exist. Even the names originally given to grades no longer bear any relationship to what they represent today."*

Trade Associations: There are two major tea associations in the United States serving the tea trade, namely, Tea Association of the United States of America, Inc., and The Western States' Tea Association. These associations continuously provide useful technical and trade information to their members on subjects such as market research, brewing, merchandising, traffic and testing panels.

COMPETITIVE ASPECTS OF THE INDUSTRY

There are three main aspects of competition in tea industry in the United States:

- (a) Competition among India teas,
- (b) competition between India teas and teas imported from other producing countries, and
- (c) competition among the US brands of tea.

(a) *Competition among India Teas:* Since tea is exported from India unblended and the United States buyers are interested mostly in the best quality India teas, which happens to be the case with buyers from other countries too, there tends to be greater demand for such teas than their supply. The competition is, therefore, less for low quality India teas.

*Keegal, F.L., *Tea Manufacturers in Ceylon*, p. 102.

Since most of the estates in districts producing high quality teas are owned by the British interests, these teas are mostly shipped directly by their agents in India to London. Complaints have been made by the Tea Council of Ireland as well as tea trade from Iran that these teas do not reach Calcutta auctions for sale. There are four main commercial grades of India tea according to the size of the leaf emerging from the sieve: Leaf Grade, Broken Grade, Fannings Grade and Dust Grade. It is the first two grades that are in great demand in the United States mainly because the size of the leaf is larger and thus the teas are supposedly of higher quality. These grades are available in India virtually all the year round.

(b) *Competition between India Teas and Teas Imported from other Producing Countries:* India's major competitor in the United States tea market is Ceylon although tea is continually being imported at increasing rates from other countries as well. These countries include Indonesia, Formosa, Japan, Kenya, Tanganyika, Argentina, etc. The figures are shown in Table III. It is clear from the Table that while India has been losing its share of the US tea market since 1946-50, Ceylon has increased its share over this period and to about the same extent as India lost its.

TABLE III
TEA IMPORTS INTO THE UNITED STATES
1936-1940 TO 1956-1960 AND 1967

(In million lbs.)

Years	Total US imports	Imports from		
		India	Ceylon	Others
1936-1940	91.0	12.5	21.4	57.1
1941-1945	84.0	38.1	30.3	15.6
1946-1950	92.4	38.4	35.6	18.4
1951-1955	101.0	36.8	39.2	25.0
1956-1960	107.8	28.9	45.3	33.6
1967	142.7	20.4	50.1	72.2

SOURCE: (1) Tea Board, Calcutta, *Report by the Tea Delegation to the United States and Canada*, 1962, p. 2.

(2) Department of Commerce, Bureau of Census, *US Imports, General and Consumption, Schedule A: Commodity & Country*, 1968.

The US tea trade has offered several reasons for the continued decline in its imports of tea from India. These are:

- (1) High prices of India teas as compared to those of Ceylon and other producing countries for similar qualities and grades.
- (2) Lack of guarantee by suppliers in India for year-round supply of tea.
- (3) Seasonal nature of production in North India where three-fourths of the total production is concentrated.

In addition to the regional differences in the quality of teas due to climatic variations, there are three different processes of manufacture of tea used in India: the orthodox method; the leg-cut method; and the method of cutting, tearing and curling (CTC). An attempt is made under the last method to produce a uniform quality of tea. The CTC method has been adopted in South India by a large number of producers of tea in the industry without studying the need of buyers or without convincing them of the quality differences between the tea manufactured under the costly CTC method and the other two methods. The US tea trade is indifferent to the use of CTC teas in its blends mainly because the trade has not been convinced of its claimed uniformity and superior quality. Proper promotion efforts in this case have been lacking on the part of the Indian tea industry.

The lack of standardisation with regard to the quality and other commercial characteristics in the particular teas produced in the world presents a serious problem to marketing men.

(c) *Competition among US Brands of Tea:* Unlike coffee, there are hardly any brands of tea in the United States that are completely associated with any one producing country. About 79 per cent of the US tea market is in the hands of four major packer-distributors:

	<i>Per cent</i>
Lipton	45
Standard brands	12
Tetley	12
Salada	10
TOTAL	79

There are some national and regional grocery chain stores which sell tea under their own private brands in their own retail

stores. Then, there are some packer-distributors who virtually control the institutional market.

The major packers control the US tea trade in every respect. The "big four" have created almost insurmountable barriers to competition and to entry into the US tea market.

It can be concluded that our tea industry has not made any effort to become market-oriented. Product analysis has not yet received attention of either the Government of India through the Tea Board or the Indian tea companies. Direct contacts between tea producers in India and tea buyers in the United States also do not seem to be well-developed.

TEA DRINKING IN THE UNITED STATES

Tea drinking in the United States is not of recent origin but is a fundamental old social custom. Tea, once a rich man's drink, has now become a drink of the common or average individual. Today there is tea in about 90 per cent of the households.

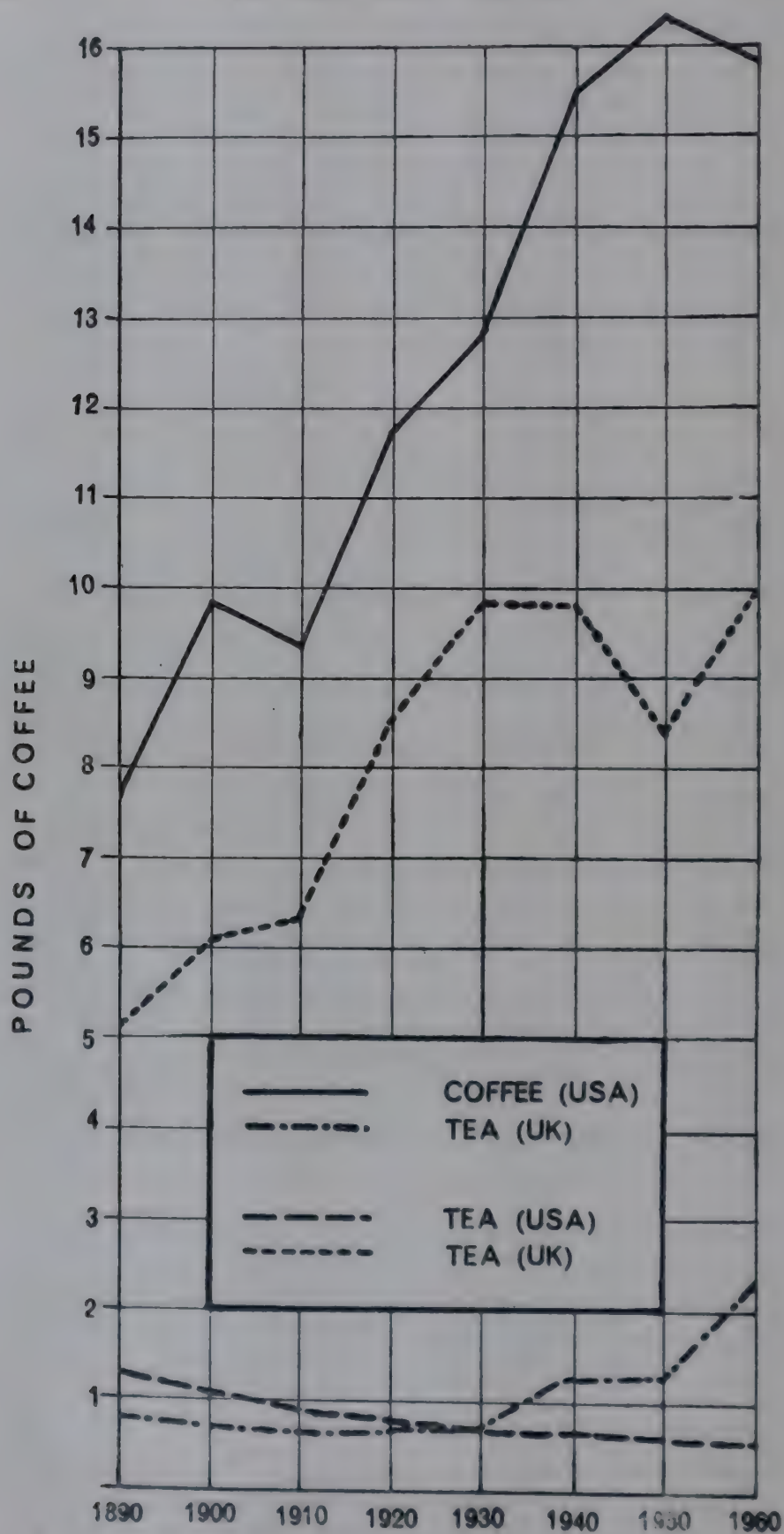
The per capita consumption of coffee and tea both in the United States and the United Kingdom from 1890 to 1960 is shown in Figure II on the next page. Per capita consumption of coffee in the United States increased from 7.77 lbs. in 1890 to 15.70 lbs. in 1960, whereas the per capita consumption of tea dropped from 1.32 lbs. in 1890 to 0.61 lb. in 1960. On the other hand, consumption of both coffee and tea increased in the United Kingdom. This only goes to show the failure on the part of the Indian tea industry to recognise the US tea market as a potential growth market.

There is much regional disparity in the consumption of tea in the United States, as could be inferred from Table IV on p. 441. The Table shows that tea drinking is more popular in the east than any other region in the United States and that this difference is well pronounced. The variation, however, is much greater in the case of soft drinks.

Ethnic origin is perhaps the biggest single reason for these wide variations in the consumption of tea. For example, a large portion of the New England population is more directly of English and Irish origin and their habit of drinking more tea is one which their forebears brought with them as immigrants.

No countrywide motivation research study has been made on why people drink tea or do not drink tea. Such studies have been done by the beer industry, the coffee industry and by selected companies like the Coca-Cola Company in the soft drinks industry. Even the data on trends of tea consumption in the United States

Fig. II — TEA AND COFFEE PER CAPITA CONSUMPTION IN THE USA AND THE UK



Note: Per capita consumption of tea for 1967 in the USA works out to 0.71 lb.

Source: *Tea and Coffee Buyers' Guide*, 21st Edition, 1962-63, p. 200.

TABLE IV

REGIONAL VARIATIONS IN BEVERAGE CONSUMPTION IN 1961
(CUPS, GLASSES OR BOTTLES PER DAY PER PERSON)

Region	Tea	Coffee	Milk	Soft drinks	Juices
East	0.63	2.64	1.04	0.43	0.63
Mid-west	0.35	3.37	1.28	0.54	0.48
South	0.36	2.56	1.06	0.68	0.36
West	0.38	3.51	1.29	0.39	0.53
National average	0.45	2.97	1.16	0.51	0.50

NOTE: Figures after 1961 not available.

SOURCE: Pan American Coffee Bureau, New York, *Coffee Drinking in the United States*, Winter 1961, p. 11.

available from studies conducted by manufacturers of other beverages have not been made use of to the best advantage of the tea industry.

Great differences in climate, from one geographical area to another, create sharp variations in tea consumption habits and per capita usage of tea. Even the popularity of hot tea as compared to iced tea varies from region to region. According to a survey conducted by the Tea Council of the USA in 1951-52, hot tea was more popular in the east and iced tea in the south. Results of the survey are shown in Table V.

TABLE V

RELATIVE CONSUMPTION OF HOT TEA AND ICED TEA
IN THE US, 1951-1952

	Total %	East %	Mid-west %	South %	West %
Hot Tea	52	65	43	39	55
Iced Tea	48	35	57	61	45
TOTAL	100	100	100	100	100

NOTE: Further data on the subject not available from any published sources.

SOURCE: Office of the Tea Adviser, Consulate General of India, New York, *Some Marketing Facts* (unpublished), 1961, p. 2.

In the United States, tea is sold in various forms such as loose tea in packages, in tea bags and as instant tea. A breakdown of tea sales by type from 1950 to 1961 is shown in Table VI.

TABLE VI
TEA SALES IN THE UNITED STATES BY TYPE
1950-1961

<i>Year</i>	<i>Loose tea</i> %	<i>Tea bags</i> %	<i>Instant tea</i> %
1950	59.4	40.0	0.6
1955	48.1	51.1	0.8
1958	40.5	57.2	2.3
1959	38.7	58.0	3.3
1960	35.2	59.2	5.6
1961*	31.8	61.6	6.6

*Estimated.

NOTE: Further data on the subject not available from published sources in India.

SOURCE: *World Coffee & Tea*, December 1961, p. 54 (World Coffee & Tea, Inc., New York, N.Y.).

The Table indicates that the share of tea bags has increased considerably in recent years while sales of loose tea are on the decline. Instant tea has also become popular as a convenience product.

It is interesting to note that the sale of tea gives the packers, the supermarkets and the grocery stores a much better per unit return than coffee. But coffee comprises by far the bulk of their total sales, in case of the many packer-distributors of tea who also market coffee.

Most of the tea in the US for the home market is sold through the supermarkets. Since no counter service is generally offered in supermarkets, a prominent display of any particular brand, other things being equal, tends to increase its sale. Therefore, factors that play a significant role in the sale of tea in the US are attractive packaging, prominent point-of-purchase displays and pre-selling through advertising.

COMPETITION WITH OTHER BEVERAGES AND SUBSTITUTES

A national survey was carried out during the summer of 1961 by Market Facts, Inc., of the American consumer's beverage drinking habits. Respondents were asked to recount all beverages consumed within the preceding 24-hour period plus the time and place of consumption. The percentage of consumers using the various beverages during the period of the survey was as follows:

	<i>Per cent</i>
Milk & milk additives	60
Coffee	55
Soft drinks	48
Fruit juice and drinks	40
Tea	34
Beer	9
Vegetable juice	3
Liquor	3

(The total exceeds 100 because of multiple checks.)

The market shares of various beverages were divided as follows:

	<i>Per cent</i>
Milk & milk additives	28.0
Coffee	25.0
Soft drinks	18.0
Tea	14.0
Fruit juice and drinks	9.0
Beer	5.0
Liquor	1.0
Vegetable juice	0.5
Wine	0.5

(The total exceeds 100 due to rounding-off figures.)

During the survey period, tea was consumed by 34 per cent of the respondents. There seemed to be a strong new popularity of tea, particularly at meal times. It is also interesting to note that 42 per cent of the total coffee volume was consumed at the time of breakfast.

At present, the soft drinks industry seems to be posing tough competition to tea and possibly to other beverages also. They are doing it with the introduction of new low-calorie drinks.

The tea industry in the United States is faced with a unique problem. Too many people know about tea already, but not enough motivation is provided to make them drink more tea. A relatively small percentage of people in the United States drink an overwhelming percentage of tea that is used.

A depth study was conducted by the Tea Council of the United States of America for its 1961-62 hot tea advertising campaign. The results were interesting. The same symbols and images of hot tea were found to exist throughout the population, but the values placed on these symbols and images were quite different for tea drinkers and non-drinkers. The most important meaning attached to hot tea by tea drinkers seemed to be a sense of being tranquil, quiet, relaxed and refreshed. It also implied choice or achievement of a serene, satisfied way of life. However, the non-tea drinker saw the tea drinker as being too intellectual, too nice, too fussy and over-civilised.

Early experiences were also found to have had an important influence on beverage likes and dislikes. The choice for a particular beverage is based on a combination of the availability of the beverage and the natural desire to emulate adults who are respected and admired. The tea drinkers emphasised the medicinal properties of tea. They found in tea a flexible drink fitting many moods and occasions.

HISTORY AND METHODS OF ADVERTISING AND PROMOTION OF INDIA TEA IN THE UNITED STATES

Promotion of India tea in the United States began with the opening of the Chicago's World Fair in 1893, when a group of Indian tea estate-owners pioneered in organising themselves to raise a fund for themselves. At the World Fair, many Indian products were displayed and sold, and the method of tea brewing was demonstrated to the public. The participation in the Fair proved so successful and encouraging that efforts were made to establish a permanent fund, called the Voluntary Foreign Market Fund. The Fund, administered by a committee of the Indian Tea Association, Calcutta, was to be used for advertising and promotion of tea, especially in the United States.

In 1899, India stopped its single-nation promotion efforts and joined hands with Ceylon, contributing a relatively small amount of money to the Ceylon Fund to maintain some general advertising of India tea with that of Ceylon in the newspapers. The joint promotional venture continued till 1904.

Tea was advertised and promoted from 1905 to 1918 by India's Resident Tea Commissioner in the United States, Mr. Blechynden. Advertisements were given in newspapers, samples of tea were distributed, postcards and showcards were used, and India tea sales representatives were detailed to accompany wholesalers' salesmen to help them push India tea through the retail channels in the country.

The publicity campaign was renewed in 1923 through advertising companies in the country. The Indian Tea Association was, however, not satisfied with the results of its campaigns. It is significant to note that, after the year 1923, although investments in advertising and promotion were either maintained at the 1923 level or increased, imports decreased by about 12 million lbs. in 1924. In 1927, Major Norman McLeod, Vice Chairman of the Indian Tea Association, London, was delegated the responsibility of evaluating India's advertising campaigns and promotion methods in the US.

The following recommendations made by Mr. McLeod were promptly implemented:

- (1) Appointment of Mr. Leopold Beling as Commissioner for India tea in the US in 1927,
- (2) formation of India Tea Bureau in 1928 to formulate and coordinate all promotional activities in the US,
- (3) use of newspaper and magazine advertising,
- (4) use of silhouette map-of-India emblem in advertising copies and on packages by packers of blends using at least 50 per cent of India tea, and
- (5) publication of *India Tea Tips*, designed to provide tea distributors with detailed accounts of activities (relating to production, exports, imports, etc.).

In 1935, single-nation efforts with regard to advertising and promotion of tea were brought to a complete halt with the formation of the International Tea Market Expansion Board to coordinate the promotional activities of India, Ceylon, Indonesia and, from time to time, other black tea-producing countries of the world. The Board was concerned with the promotion of tea drinking habit and not necessarily with the sale of tea from a particular country.

India withdrew from this international collaboration towards the close of 1952. The Government of India noted that the value to India of advertising and promotion by the Board had not been commensurate with the measure of its financial contributions.

The Tea Council of the United States of America, Inc., which was formed in 1953 as an international venture for tea promotion in

the United States, after several of its predecessors had already met with dismal failure, has been making some progress in the right direction. The Council has, however, suffered from lack of security of its life as well as lack of assurance on the part of its members for a definite size of its annual budget from one year to the next.

In view of the foregoing discussion, one cannot help but conclude that the various individuals and agencies involved in advertising and promotion of tea in general and India tea in particular, since 1893, have suffered from lack of consistency of purpose as well as proper efforts to achieve the necessary objective of increasing the demand for tea.

PROMOTION OF TEA BY THE US TEA TRADE

The Tea Board of India carries out its tea promotion in the US primarily through its contributions to the Tea Council of the United States of America, through occasional advertisements in the tea trade magazines in the country, and by stationing a Tea Adviser for the United States and Canada in New York. India's promotion is not directly aimed at the ultimate consumer but at the tea trade in the country.

The Director of Tea Promotion and Advertising, officially known as the Director of Propaganda, is not even a member of the Committee on Tea Promotion. Observation tours connected with the promotion of India tea overseas do not generally include the Director of Propaganda or a member of his staff. Instead the Chairman of the Tea Board, who is not a permanent official of the Tea Board and is subject to transfer by the Government of India, invariably heads delegations going overseas to study the marketing of India tea.

It will suffice to say that the Director of Propaganda should be made a member of the Committee on Tea Promotion and he or a member of his staff should be included in teams going abroad to study marketing of India tea.

EVALUATION OF ADVERTISING AND PROMOTION EFFORTS OF THE TEA COUNCIL OF THE USA AND THE TEA BOARD, INDIA

If per capita consumption of tea in the US or total imports of tea into the country are to be an index of the performance of the Tea Council, one is led to believe that the contribution has not been very significant. Per capita consumption has not changed since 1953. Imports of tea have increased somewhat but this has been more than offset by the increase in population,

Tea industry's marketing efforts aim at increasing the consumption of tea by 2 per cent a year by implanting the idea that there is such a drink as tea before people and that they should drink it. In spite of the target being so low as against the potential of increasing the demand for tea at a higher rate, the available statistics on the subject do not prove that even this target has been achieved.

The Tea Board of India does not engage itself in consumer advertising in the United States, but it does indulge in trade advertising, to a limited extent, and promotion. It is felt that the strategy and tactics used by the Tea Board and its Tea Adviser in New York are either outmoded or inferior to what is necessary and can be done in the country. This is borne out by the fact that the sale of India tea in the United States shows a secular downward trend.

A recommendation made by the Indian tea delegation of 1962 for appointment of a more knowledgeable person from India to discuss tea with the US buyers in technical terms must be studied carefully in the light of what is needed. The important point is that producers' contact with the Tea Council of the USA, and consequently with the US tea trade, should be closer and more continuous.

METHODS USED BY AGENCIES ENGAGED IN PROMOTING COMPETITIVE BEVERAGES AND SUBSTITUTES

The major competitors of tea in the beverage market include coffee, soft drinks, beer and, to some extent, fruit juices.

Among these substitutes and beverages, coffee comes closer to tea than any other commodity, especially because these two commodities are both grown outside the United States and the entire need of the country for them is met through imports. But organisation and methods used in promoting other beverages and substitutes also offer some guidelines to tea industry in doing a better job in marketing.

For example, it has been proved by the citrus industry in the US that, although beverage habits are static in the short run, they are subject to change at least in the long run. Therefore, marketing planning for such products has to be continuously reviewed and altered, if necessary.

It is important to realise that product innovation—its form, flavour, current uses, new uses, methods of use, etc.—must be part of a marketing programme for study and adoption. Both the American Coffee Bureau and the Sunkist Growers, Inc. (Citrus fruit) have demonstrated the need for product innovation.

No beverage is the beverage for all or everyone. Market research must be undertaken so that the market can be segmented, if necessary, into ethnic groups, age groups, income groups, geographical areas, males and females, athletes and intellectuals. Both the beer industry and the Pan American Coffee Bureau have underscored the need to conduct market research before undertaking a marketing campaign.

The importance of "follow-up" should not be minimised, and efforts to promote a product should also be based on, and in the light of, the previous experience.

FINDINGS OF THE TEA TRADE SURVEY

A mail survey was conducted by the author in 1963 among importers, packers, agents, brokers, wholesalers, soluble tea manufacturers and other members of the US tea trade specifically to determine their current thinking on selected marketing questions about tea, in general, and India tea, in particular. Of the 214 questionnaires mailed, replies were received from 53 firms giving a sample of 24.8 per cent. It is important to note that the survey attracted the attention of higher management in companies responding to it.

It is not possible to definitely say that the respondents of the tea trade survey were truly representative of the US tea trade. If it is assumed that the findings represent the views of the tea trade and are applicable to the problem of marketing India tea in the US, the following conclusions may be drawn:

- (1) Although the traditional method of purchase of the commodity is the auction, the majority of the US tea trade were willing to establish direct connections with producers and exporters of tea in India.
- (2) A large number of the members of the US tea trade considered India tea to be of high quality and not necessarily high-priced. A majority of the respondents were in favour of the Tea Board's action to station a representative in New York.
- (3) The tea trade was in favour of making the Tea Council of the USA, Inc., a strong organisation, both financially and membershipwise. The trade also emphasised the need for better advertising and further research to improve the quality of instant tea, teaching better brewing methods, and for maintaining high quality and a competitive retail price nationally.

- (4) It was assumed by the tea trade that India's share of the US tea market would increase automatically with the increase of overall tea consumption. In addition, the suggestions offered included advertising by the Indian tea industry, the use of a distinctive Indian symbol for all teas coming from India, and selling directly to the US tea trade instead of making it buy at auctions in India or London, or from tea importers in the US.

SUGGESTED IMPROVEMENTS IN STRUCTURE AND METHODS FOR MARKETING INDIA TEA IN THE US

An attempt is made here to suggest improvements both in structure and in methods that are likely to increase primary demand for tea as a generic product as well as help the Indian tea industry increase its share of the United States tea market. It is believed that the opportunity to further increase the demand for tea in the United States, though not unlimited, does exist.

The problem of marketing India tea in the United States centres on an objective market analysis, product research and development, introduction of proper brewing equipment and methods, and consumer research. Efforts made by the US tea industry have either been sporadic or lacking in depth of analysis. A great deal of emphasis has been laid on advertising and promotion of tea with little or no effort to expose problems and opportunities connected with it so that efforts could be directed to those areas. No countrywide motivation research study has been done on why people drink tea or do not drink tea. No scientific effort has been made to determine whether there is a correlation between tea drinking and other variables like income of the consumer and his age.

The major problems in marketing of India tea in the United States may, therefore, be summarised as follows:

- (1) Lack of direct contacts between the tea trade in the US and tea exporters in India,
- (2) absence of simplified standards for India tea,
- (3) lack of customer-orientation on the part of the Indian tea industry,
- (4) lack of trained personnel in international marketing to conduct marketing campaigns in economically advanced countries, and

- (5) the failure of the US tea trade to include identity of the country of origin in tea brands and labels.

Buying habits of consumers and marketing institutions in the United States have undergone a considerable change since the arrival of the first tea shipment from India. Advertising has assumed new proportions and gained an important role in marketing in the US. Even food retailing has undergone a considerable change.

Marketing of India tea in the United States, however, has gone unchanged or perhaps has regressed. India has continued to follow the century-old method of "disposing off" its tea at auctions in Calcutta, Cochin and London. This practice may be beneficial to the tea trade within India, but it does not help much in India's tea exports. Unfortunately, the Tea Board's marketing philosophy has centred on the thought that the buyer should find the seller. Such has been the traditional way of doing things for decades. In other words, despite the need and the promises made by the Tea Board to expand overseas markets in order to meet export targets laid down in India's successive Five-Year Plans, no scientific approach has been followed in consonance with the planned economic development of the country. Research and evaluation of markets, products and consumers are necessary to provide continuity and permanency to a successful marketing programme.

The situation also makes it necessary for the Indian tea trade engaged in the export of tea to the United States and for the Tea Adviser of India at New York to develop close contacts with the US tea trade. The Tea Adviser's office should provide all kinds of incentives and services such as provision of marketing data, standardisation and simplification of grades of India teas, and information on availability of quality teas with prices and location, to interest the US tea buyers to use more India teas in their blends than at present. In order to provide these services to the US tea trade, it is necessary to strengthen the office of the Tea Adviser of India at New York to include the Tea Adviser, an Assistant Tea Adviser, a secretary and a general clerk. The purpose of developing personal contacts with the US tea trade can be fulfilled by inviting the members of the US tea trade to organised meetings and informing them of the availability of services provided by the office of the Tea Adviser of India.

The basic organisational structure of the Indian tea industry and that of the Tea Board need overhauling. The whole set-up is obsolete, rigid and static. It is of paramount importance to introduce streamlining, coordination and integration of services of the various functionaries engaged in marketing India tea overseas.

There is need to develop simplified standards for India's teas. The existing standards in the tea industry are not only obsolete but meaningless factors in achieving premium for the produce or for giving the buyer recognisable labels.

It is necessary that the Tea Council should grow stronger and become truly representative of all growers of tea as well as of the US tea trade. Growth should be in the form of both financial health and membership. Financial guarantee can be secured for the Council only on finding a workable and permanent method of contributions. It is recommended that a fixed amount of fee be charged on every hundred lbs. of tea imported into the United States. This amount should be paid by importers as well as by countries exporting tea to the United States. A fund should thus be created for the operation and work of the Council.

A significant observation is that underdeveloped countries such as India tend to belittle the need for training their men in the discipline of marketing and thus relatively less emphasis is laid on the need for developing new markets. The Third Five-Year Plan stated that one of the main drawbacks in the past had been that the programme for exports had not been regarded as an integral part of the country's development effort under the first two Plans. The tendency does not seem to have changed since. In order to develop markets in foreign countries, underdeveloped nations will have to train a corps of men in the discipline of marketing to help in their efforts.

The main recommendations made to overcome shortcoming in marketing methods of India tea in the United States, uncovered by the study, may be summarised as follows:

- (1) A comprehensive market analysis is a prerequisite to a successful marketing campaign for tea. This analysis should be supplemented by research on brewing equipment.
- (2) Direct contacts should be established between the US tea trade and tea exporter in India if a promotion of India tea is to be successful beyond the general level of all tea consumption.
- (3) The functions of the Indian Tea Adviser's office should be enlarged to include the provision of marketing data such as availability of teas in India and trends of the US tea market to the US tea trade and the Indian tea industry respectively.
- (4) The need to develop simplified standards for India teas should be recognised. Existing standards in tea industry are not only obsolete but also meaningless as factors in

achieving premium prices for the producer or for giving the buyer recognisable labels.

- (5) The Tea Council should be strengthened both membershipwise and financially to carry out a proper programme of research and promotion of tea.
- (6) It is essential that programmes and plans for exports by underdeveloped countries be treated as integral parts of their overall economic development plans. In order to develop and maintain markets for their products in foreign countries, they should recognise the need for developing a corps of men trained in international marketing to carry out such plans effectively.

INTERNATIONAL OPERATIONS OF SWISS BANKS IN THE CONTEXT OF WORLD TRADE

By James A. Hart

SWITZERLAND has long enjoyed a prominent position in the world of international finance, which is far out of proportion to its modest economic statistics. The population numbers a mere 6 million and the land area is only 15,000 square miles (about one quarter of the size of the state of Illinois). And in spite of these limitations Switzerland has been a major banking nation for more than two centuries.

Zurich, the largest city, has less than 500,000 inhabitants, but it has become one of the leading international banking centres of the world along with New York, London, Paris, Frankfurt, Brussels and Tokyo, which are all far larger than Zurich in population and industrial concentration. This powerful financial position of Switzerland has resulted from a combination of many factors. The principal causes of this development are as follows:

- (1) Long-standing policy of neutrality in a world of international upheavals,
- (2) an emphatically liberal economic policy,
- (3) reliable parliamentary government,
- (4) a stable and convertible currency,
- (5) a distaste for financial experimentation,
- (6) special legal protection given to secrecy in the banking business, and
- (7) industry, skill and thrift of the population.¹

Switzerland is a nation of so many superlatives that many students lose sight of its outstanding position in world trade. At the same time, the Swiss banks receive so much attention and scrutiny for their more spectacular operations that these same students fail to see the powerful role played by the Swiss banks in the promotion of world trade. This paper aims to examine both of these points in some detail.

¹*Banking in Western Europe*, R.S. Sayers, et al., 1962, Oxford, Clarendon Press, p. 174.

I. SWISS POSITION IN WORLD TRADE

Although Switzerland ranked 70th in population among the nations of the world in 1965, it ranked 12th in both exports and imports.² Swiss exports in 1967 accounted for 27 per cent of the nation's Gross National Product and helped maintain this highly developed economy on a satisfactory level. Without such exports the Swiss could not remain at full employment. On the import side, the prosperous Swiss consumers and factories exercise a sizable demand for the products of the rest of the world.

Because of its lack of arable land Switzerland is a net importer of food and shortage of natural resources requires it to buy most of its industrial raw materials abroad. As a result, the Swiss have a chronically unfavourable balance of trade. Fortunately, however, the country has been able to overcome this deficit with tourist receipts, income from foreign investments and other services rendered to foreigners by the Swiss.

The export and import figures for Switzerland from 1962 to 1967 are given below:³

(In billion SF)

<i>Year</i>	<i>Exports</i>	<i>Imports</i>	<i>Balance of trade</i>
1962	9.5	12.9	—3.4
1963	10.4	13.9	—3.5
1964	11.4	15.5	—4.1
1965	12.8	15.9	—3.1
1966	14.1	17.0	—2.9
1967	15.1	17.7	—2.6

These statistics reveal that the trade deficit has been declining since 1964. This trend continued in the first half of 1968, when the unfavourable balance shrank to SF 1.1 billion as compared with a deficit of SF 1.6 billion in the first six months of 1967.⁴

²*Statistical Yearbook, 1966*, United Nations, New York, 1967, p. 390.

³*Switzerland in Figures 1968*, Union Bank of Switzerland, Zurich, 1968.

⁴*Neue Zürcher Zeitung*, Zurich, July 19, 1968.

This shrinking deficit in Swiss trade can be illustrated in terms of the ratio of exports to imports. The ratio for the period, 1963 to 1967, is given below:

	<i>Per cent</i>
1963	74.6
1964	73.8
1965	80.7
1966	83.5
1967	85.5

During the first half of 1968, the ratio increased to 87.4 per cent as compared with 81.7 per cent in the same period in 1967.

Germany has usually been the leading trading partner of Switzerland, both in exports and imports. As regards exports in 1967, the percentages taken by major customers were as follows:

	<i>Per cent</i>
Germany	13.3
US	10.3
France	9.1
Italy	8.6
UK	7.5
Austria	5.1

In respect to Swiss imports, the major suppliers were as follows:

	<i>Per cent</i>
Germany	28.8
France	13.3
Italy	9.9
US	8.2
UK	7.8

The bulk of Swiss exports tend to fall into five broad classifications, shown in the first table on the next page.⁵

Total exports in 1967 increased by 6.8 per cent over 1966, which was less than the 10.4 per cent increase registered in 1966 over 1965. The best increase in the major categories in 1967 occurred in chemicals and drugs, although here again the rate of increase was not as high as in 1966.

⁵*Switzerland in Figures 1968, op. cit.*

(In billion SF)

	1964	1965	1966	1967
Machinery and equipment	3.7	4.2	4.6	4.9
Chemicals and drugs	2.2	2.5	2.8	3.0
Watchmaking	1.6	1.8	2.0	2.1
Textiles	1.2	1.2	1.3	1.4
Food	.6	.6	.7	.8
TOTAL SWISS EXPORTS	11.4	12.8	14.2	15.1

Imports into Switzerland are largely in four major classifications. The table below shows this concentration.⁶

(In billion SF)

	1964	1965	1966	1967
Raw materials and semi-finished products	6.9	7.2	7.7	7.9
Electric power and fuels	.9	.9	.9	1.0
Capital goods	2.7	2.6	2.9	2.8
Consumer goods	4.9	5.0	5.3	5.8
TOTAL SWISS IMPORTS	15.5	15.9	17.0	17.7

This consistently adverse trade balance could be a problem, if it were not for the other much more favourable items in the Swiss balance of payments. The following table sets forth the balance of payments in millions of US dollars for 1966 and 1967.⁷

	1966	1967
Trade balance	-650	-595
Services (including unilateral transfers)	+770	+815
Current balance	+120	+220
Net capital movements (includes errors & omissions)	-135	-105
Overall balance	-15	+115
(equals changes in net official assets and net foreign position of commercial banks)		

⁶Switzerland in Figures 1968, *op. cit.*

⁷Thirty-eighth Annual Report, Bank for International Settlements, Basle, 1968, p. 88.

Services, as employed in the above table, include net income from tourism, net income from investments and net income from other services. As the table shows, the services account yielded a net total of \$815 million to Switzerland in 1967. A breakdown of this account includes:

Net income from tourism—\$394 million

Net income from investments—\$333 million

Net income from other services—\$88 million

Thus, the net services account in the amount of \$815 million more than offset the \$595 million trade deficit of Switzerland. This produced a net balance in the current account of \$220 million. With this sizable net balance on current account, the Swiss could support a net capital outflow of \$105 million and still have an overall balance of \$115 million for the year 1967.

II. ROLE OF SWISS BANKS

To overcome its consistently adverse trade balance, Switzerland has built up a finely tuned economic system. And within this 21-jewel economy the Swiss banks make a tremendous contribution to the stabilisation of the balance of payments. This contribution of the banking community is really three-fold as follows:

- (1) Assistance to Swiss exporters in maximising their overseas sales,
- (2) assistance to Swiss importers in acquiring their goods abroad at the minimum cost, and
- (3) assistance to Swiss investors in the efficient management of their overseas investments.

This important contribution to the improvement of the Swiss balance of payments involves a wide range of highly sophisticated international banking operations. Not more than 100 of the 1,600 banks in Switzerland have the personnel and resources required to efficiently perform such operations. This paper proposes to examine the following five international banking operations, which are the most helpful to the Swiss balance of payments:

- (1) Overseas offices of Swiss banks to service Swiss exporters and importers and to manage overseas investments,
- (2) low-cost loans to finance exports and imports,
- (3) low-cost financing of direct overseas investments of Swiss firms,

- (4) professional staffs for the management of foreign securities in investment portfolios administered by the banks, and
- (5) switch trading facilities to eliminate the restrictions inherent in bilateral trade agreements.

I. OVERSEAS OFFICES OF SWISS BANKS

While the Swiss banks generally do a large volume of overseas business, they have been able to do so with comparatively few overseas offices. For the most part, they have used correspondent banks in foreign countries to assist them in these operations. However, the Big Three commercial banks (Union Bank of Switzerland, Swiss Bank Corporation and Swiss Credit Bank) have built up modest networks of offices overseas and some of the other banks have established an office here and there.

As of the end of 1967, the Swiss Bank Corporation had the largest system of foreign offices. It had two branches, located in London and New York, and there was one agency in San Francisco. Swiss Bank Corporation also had nine representative offices in the following financial centres: Paris, Sao Paulo, Rio de Janeiro, Buenos Aires, Lima, Mexico City, Hong Kong, Tokyo and Madrid. Finally, it had two affiliate banking companies, one in Montreal and the other in Casablanca.

Branch offices overseas are equipped to carry on much the same kinds of business as branch offices in Switzerland, subject of course to the laws of the host country. Such branches can usually accept deposits and make loans in the countries where they are located. An agency office is merely entitled to make loans and has no authority to accept deposits. The representative office cannot make loans and cannot accept deposits: it may simply provide information to prospective customers about the services of the head banking office in Switzerland. Affiliate banks are distinct corporations, formed under the law of the host country, in which the Swiss parent owns a portion or all of the capital stock. The Montreal affiliate, Swiss Corporation for Canadian Investments Ltd., is wholly owned by Swiss Bank Corporation. The Casablanca affiliate, Banque Americano-Franco Suisse pour le Maroc, on the other hand, is owned in concert with two other banks, Credit Commercial de France of Paris and Continental Illinois National Bank and Trust Company of Chicago.

Union Bank of Switzerland had only one branch as of December 31, 1967, and that was in London. It had five representative offices in the following cities: Beirut, Buenos Aires, Johannesburg, Tokyo and New York.

Swiss Credit Bank as of the end of 1967 had one branch, in New York. In addition, it had two affiliated companies, Swiss American Corporation in New York and Credit Suisse (Canada) Limited in Montreal. It also had three representative offices, in London, Buenos Aires and Beirut.

Aside from the Big Three, the other Swiss banks have only an occasional foreign office. Julius Bar & Co. of Zurich, the largest private bank in Switzerland, established a London subsidiary in early 1968. This merchant bank in London is called Julius Bar International and its Zurich parent owns 51 per cent of the stock. The balance is held by Union Dominions Trust, a major instalment finance company in Britain.⁸

Swiss-Israel Trade Bank of Geneva, the seventh largest bank in Switzerland, is the largest Swiss bank under foreign ownership. It has both a representative office and an affiliate bank in New York (the American Bank and Trust Company). Discount Bank (Overseas) Ltd. of Geneva and Foreign Commerce Bank of Zurich both have representative offices in New York.

It should be pointed out that Swiss banks do not need the approval of their government in order to establish a foreign office. However, they must secure the approval of the host government in most cases. For example, the state of New York must pass on all branches, agencies and representative offices in that state.

It should be noted that Union Bank of Switzerland is the only one of the Big Three, which has no branch in New York. This decision is believed to be traceable to Dr. Alfred Schaefer, Chairman of the Board, who argues that it is wiser to cooperate with major US correspondents rather than to open a branch and compete with them. Probably the Union Bank has not lost too many accounts of Swiss customers to its chief rivals, Swiss Credit Bank and Swiss Bank Corporation, which do have full service branches in New York. At the same time, Union Bank has probably secured more than its share of business from the big US banks because of the goodwill generated as a result of not establishing a branch in New York.

Another advantage of having only a representative office has been to free the officers of Union Bank from the demanding details of managing a branch. As a result, the representatives of the bank have been able to travel more throughout the United States and call on prospective customers. The New York representatives (there are only two) travel broadly in the United States, calling

⁸*Economist*, March 9, 1968, p. 83.

on firms that might be able to use the services of the Swiss home office.

As a matter of fact, Union Bank of Switzerland did not even have a branch in London until November 1967. It probably would not have established that branch, except for the necessity of tapping the Eurodollar market in London. Swiss law requires that banks paying interest on deposits of individuals withhold taxes before sending interest cheques to the depositors. Thus, Union Bank of Switzerland could not attract Eurodollar deposits as easily to its Zurich office as it could to a branch in London, where there is no such tax on interest.

2. LOW-COST LOANS

Swiss banks offer their customers the following methods of obtaining a short-term commercial loan:

- (1) *Overdraft agreement*: The bank agrees to honour overdrafts on the borrower's account up to a fixed amount. This is by far the most common method used.
- (2) *Straight loan*: This is the method employed by American banks, where the borrower executes a note and the proceeds are entered in his account. It is seldom used for short-term loans in Switzerland.
- (3) *Discounting bills*: This method is commonly used in Switzerland, usually for 90 days or less.⁹

Most short-term commercial loans in Europe are made on an overdraft basis rather than through a promissory note. The main reason for this system is tradition in European banking. Another reason in Switzerland is that short-term notes are subject to a stamp tax while overdraft loans are not. The customer negotiates an overdraft with his bank in much the same way he would a straight loan on his promissory note in the United States. Then he receives a letter from the bank informing him that a current account credit for the amount agreed upon has been established in his favour. The customer-borrower can now overdraw his account up to the amount fixed in the letter.

Overdraft facilities are rarely granted for a period over one year, although renewals are possible. As of January 1968, Swiss franc overdrafts carried an interest rate, payable quarterly, of 5.25 per cent on the daily outstanding balance. To this was added a

⁹"Short-Term Borrowing in Europe", *The Banker*, London, May 1967, pp. 396-411.

quarterly commission of 0.25 per cent in the case of unsecured overdrafts, computed on the highest debit balance during the quarter. This raised the total cost of the unsecured commercial loans to 6.25 per cent per annum. In most cases, this commission for secured loans is only 0.125 per cent per quarter, making the total cost of a secured commercial loan only 5.75 per cent. If the customer desired his overdraft facility in US dollars rather than Swiss francs, his total cost would be 0.5 per cent higher, or 6.75 per cent on unsecured and 6.25 per cent on secured loans. In overdrafts running above SF 20 million, the agreement was usually split up among several banks.

It should be noted that there is no compensating minimum balance required of the borrower in Switzerland, as there would be in most American banks. The Swiss banks were quoting rates of 6.25 per cent to their best customers while banks in the United States had a prime rate of 6 per cent, but the Swiss were lending the money without the necessity of compensating minimum balances. A compensating balance of 20 per cent quickly brings the cost of a 6 per cent loan from an American bank up to 7.5 per cent.

Straight loans, as they are used by American banks, are more common in medium-term loans than in short-term in Switzerland. However, sometimes a Swiss bank will make a straight loan for a minimum term of six months. It is essentially a loan for an agreed period, on which interest is charged for the entire period. No commission is charged on such a loan and no minimum balance is required. If the loan is not paid by the agreed time, it may be renewed or it may be switched to an overdraft facility at a higher interest rate. Interest rates on straight loans in January 1968 were about 5.25 per cent, the same as for overdrafts. But as mentioned above, no commissions were added.

Discounting bills is an occasional method of getting a short-term loan in Switzerland. The bills must be genuine trade paper with good signatures. The discount rate is usually 0.5 per cent above the Swiss National Bank's discount rate, which was 3 per cent in January 1968, making a total of 3.5 per cent. The note is discounted with recourse to the customer and the customer has to pay a stamp tax of 0.0005 per cent per half year.

Traditionally, Swiss short-term commercial loan rates are comparatively low, usually the lowest in the world. According to a survey as of May 10, 1968, the short-term commercial loan costs for American corporations in Europe ran as follows:¹⁰

¹⁰*Lybrand Newsletter*, Lybrand, Ross Brothers & Montgomery, New York, June 1968.

	<i>Per cent</i>
Austria	7.5 to 9.5
Belgium	5 to 7
Denmark	9 to 10
France	6 to 8
Germany	4 to 7.5
Italy	7 to 9
Netherlands	6.5 to 8.5
Norway	7
Spain	6.5 to 8.5
Sweden	8
Switzerland	4 to 6.5

3. FINANCING DIRECT INVESTMENTS OVERSEAS BY SWISS FIRMS

As described previously, the Swiss banks have been able through the years to make comparatively low-cost loans to finance world trade. They have shown the same capacity in granting medium- and long-term loans to finance direct investments overseas for their Swiss customers.

Because their domestic market was so small, Swiss manufacturers long ago saw the need both for exports and for the establishment of plants in foreign countries. In 1966, the *Fortune* list of 200 largest industrial firms outside the United States included eight Swiss firms. This gave Switzerland 6th place in a tie with Sweden, compared with 56 for Britain, 38 for Japan, 26 for Germany, 23 for France and 12 for Canada.¹¹

The eight Swiss manufacturing firms, listed among the international giants, consisted of four firms in the chemical and drug field, two in machinery, one in food products and one in aluminium.

Nestle Alimentana with its headquarters at Vevey on Lake Geneva was by far the largest Swiss manufacturer. It ranked 10th among the leading 200 outside the United States with sales of \$1.7 billion in 1966. On invested capital of \$186 million, it earned \$30 million in that year. Nestle employed 86,000 workers and had assets of \$383 million.¹² It is often called the world's "most international corporation" because its sales in Switzerland represented only 2 to 3 per cent of its total sales. Nestle has only

¹¹"The 200 Largest Industrial Companies Outside the US", *Fortune*, New York, September 15, 1967, p. 145.

¹²*Ibid.*

four factories in Switzerland as compared with 24 in Britain, 21 in France, 14 in Italy, 14 in the United States, 12 in Germany, 11 in Netherlands, 11 in Brazil, 11 in Spain and many others.¹³

Nestle had two managing directors at the top to direct its empire, Jean C. Corthesy and Enrico Bignami, who have served as managing directors since 1952. In recent years, they have divided up responsibilities, one handling the day-to-day operations and the other concentrating on planning. From time to time, they have switched assignments.¹⁴

The remaining seven firms on the listing of *Fortune* for 1966 ranked as follows and had sales and net profits as indicated in millions of US dollars:¹⁵

	Rank	Sales	Net profit
<i>Brown Boveri</i> (machinery)	65	728	7
<i>Hoffmann-La Roche</i> (chemicals & drugs)	84	576	16
<i>CIBA</i> (chemicals & drugs)	105	481	9
<i>J.R. Geigy</i> (chemicals & drugs)	114	456	5
<i>Alusuisse</i> (Swiss Aluminium) (aluminium)	155	326	6
<i>Sandoz</i> (chemicals & drugs)	157	320	7
<i>Sulzer</i> (machinery)	183	265	4

In the United States alone, the Swiss have increased their direct investments from \$347 million in 1950 to \$949 million on December 31, 1966. Both in 1950 and 1966, Swiss direct investments in the United States represented slightly more than 10 per cent of the total foreign direct investments. In 1966, the Swiss earned \$89 million on their direct investments in America, a yield of 9.3 per cent. Needless to say, this \$89 million represented a very substantial part of the total net income on foreign investments for the Swiss. Another point of interest is that only the Dutch and the Swiss come close to balancing their direct investments in the United

¹³*Economist*, London, August 12, 1967, p. 583.

¹⁴"A Decade of Dazzling Growth", *Fortune*, September 15, 1967, p. 134.

¹⁵"The 200 Largest Industrial Companies Outside the US", *op. cit.*

States against American direct investments in their countries. All other nations are far behind the United States in this matter. Holland actually had more directly invested in the United States as of December 31, 1966 (\$1.4 billion) than the \$858 million of American direct investments in Holland. While the Swiss on the same date had \$949 million in America, Americans held \$1.2 billion in Switzerland.¹⁶

4. MANAGEMENT OF INVESTMENT PORTFOLIOS WITH FOREIGN SECURITIES

Like other banks throughout the world, the Swiss banking institutions offer the service of managing investment funds for their customers. The customer entrusts a specific amount of money or securities with the bank under instructions to invest in securities or other types of investments. He can give the bank complete freedom in making and changing investments or he may restrict this freedom in a variety of ways. In any event, the bank makes periodic reports to the customer and collects an agreed fee for the service.

Information on the amount of investment funds in the hands of the banks is difficult to obtain in most countries. In Switzerland, the banks have been particularly successful in attracting this kind of business because of the reasons set forth on the first page of this paper.

One reliable estimate put the value of the investment accounts managed by the four largest private bankers in Switzerland at SF 8 billion. It was also estimated that the total value of marketable securities under the control of the Swiss banking system as a whole was SF 150 billion.¹⁷ This latter figure lumps together the securities in investment management accounts and all other securities held by the banks in their own accounts. However, the figure does give some idea of the magnitude of the securities held by the Swiss banks and it is known that a huge portion of this SF 150 billion is invested in foreign securities. For one reason, there are just not enough Swiss securities to absorb all the funds which Swiss banks have in securities. Secondly, the Swiss National Bank (the central bank of Switzerland) has encouraged the Swiss banks to make enough investments in foreign securities to take the pressure off prices in Switzerland. Because foreigners find Switzerland so attractive as a place to invest their funds, the danger of overheating the Swiss economy is of almost continuous concern. By taking

¹⁶*Survey of Current Business*, US Department of Commerce, Washington, September 1967, p. 51.

¹⁷"The Private Banks", *Switzerland Today*, Zurich, December 1967, p. 17.

foreign funds entrusted to their care and investing them in foreign securities, the Swiss bankers deflect the inflationary impact on their own economy.

The estimate previously quoted put the total value of marketable securities under the control of Swiss banks at SF 150 billion. Probably about SF 50 billion of this total represents securities in investment accounts of their customers, which the Swiss banks are managing. Probably the American stocks and bonds included in these management portfolios would amount to about SF 10 billion.

5. SWITCH TRADING FACILITIES

Switch trading has become an important function of some Swiss banks in the last 10 years. One estimate put the annual switch turnover in Zurich at \$150 million, as compared with \$120 million in Vienna, \$100 million in London and something less than that in Amsterdam. Some switching also takes place in other financial centres such as New York and Tel Aviv.¹⁸

There are still some 30 countries, which have bilateral trade agreements with each other. They are principally communist or developing countries, which do not have freely convertible currencies of their own and which do not want to draw down their limited supplies of hard currencies such as dollars, pounds and marks. Hence, they resort to bilateral trade agreements, which are supposed to be matching barter deals. By balancing the barter with their trading partners, these countries do not become involved in trade deficits, which would have to be settled in hard currencies.

Right after World War II, the devastated and dollar-short countries of Europe had to use bilateral trade agreements. There were more than 1,000 such agreements and the total trade carried out in this fashion amounted to over \$1 billion per year. Such trade has declined, but in 1967 there were still about 120 bilateral trade agreements in operation in the world.¹⁹

In a bilateral trade agreement, the two countries involved set targets for the lists of goods that they will buy from each other over a fixed period of time. They also arrange for settlement of this trade in "clearing dollars", which may or may not have the same book value as the US dollars. Different rates for these "clearing dollars" are fixed for different bilateral agreements.

The objective of a bilateral trade agreement is to achieve a perfect balance, but this may not happen. For example, under a

¹⁸*Economist*, London, January 14, 1967, p. 143.

¹⁹*Business Week*, New York, March 11, 1967, p. 124.

recent agreement between the Soviet Union and Austria, the Austrians had built up a credit of 9.5 million "clearing dollars", which happened to have the same rate as US dollars. The agreement provided that neither side could build up a surplus or run a deficit of more than five million "clearing dollars". It further provided that such deficits over the five million limit must be settled within 90 days. This meant that Austria could not make any further exports to the Soviet Union either until the Austrians took in 4.5 million "clearing dollars" worth of Soviet goods.²⁰

To avoid this dilemma, a Swiss bank acting as a switch trader, could have helped by selling some of these Austrian-owned Moscow "clearing dollars" to a Swiss importer at a discount.

Here is the step by step account of an imaginary but realistic transaction.

- (1) The Swiss bank buys one million "clearing dollars" from the Austrian National Bank, the central bank of Austria, at the full rate of \$1 million in US dollars.
- (2) The bank then uses the one million "clearing dollars" to pay for a consignment of Russian goods, which the Swiss importer wants to buy.
- (3) This consignment of goods ranks as an export from the Soviet Union and reduces the Soviet clearing deficit and the Austrian surplus by one million "clearing dollars".
- (4) Goods actually go to the Swiss importer, who pays the Swiss bank \$950,000 in US dollars for the one million "clearing dollars"—a 5 per cent discount.
- (5) The Swiss bank is now out \$50,000 but it can recover this on a matching transaction.
- (6) An Austrian exporter provides the matching transaction. The exporter has goods worth one million "clearing dollars" to sell to Russia but because of the deficit under the bilateral agreement, the Austrian National Bank will not at this time cash his "clearing dollars" for Austrian schillings. Accordingly, to secure immediate cash, the Austrian exporter sells his one million "clearing dollars" to the Swiss bank for \$940,000 (US), a 6 per cent discount. Thus, the matching transaction yields the Swiss bank a \$10,000 fee for its services.
- (7) The Swiss bank has completed the cycle and now owns one million "clearing dollars" on Moscow and is ready for further switching operations.

²⁰*Economist, op. cit.*

Everyone benefits from the above operation. The Swiss importer benefits because he buys his imports at a 5 per cent discount. The Austrian exporters as a group benefit because the Austrian surplus is reduced. Once it is run down below the five million limit, Austrian exporters can start shipping to the Soviet Union again. The individual Austrian exporter benefited because he got his money immediately without waiting for the Russian deficit to be corrected. The Russians benefited because their trade with Austria was continued and not interrupted until they paid out hard currency to settle their deficit. The Swiss bank benefited by making a fee of 1 per cent.

This illustration is a simplified one and many deals are far more complicated. Most of the deals are so complex that it is estimated that nine out of 10 never go through. Discounts for the importers may sometimes go as high as 45 per cent but the fee of the switch trader stays about 1 per cent.²¹

Zurich is the leading centre for switch trading, although Vienna is a close second. The leading specialists in Zurich are: Bank Cantrade, Bank Hoffmann and Bank fur Handel und Effekten.²²

Bank Cantrade probably does about one-half of all the switch trading in Zurich. It was founded by Union Bank of Switzerland in 1952 and the latter still owns 60 per cent of its capital stock. In addition to switch trading, Bank Cantrade performs the normal functions of a regular commercial bank of its size.

As of the end of 1967, Bank Cantrade reported total assets of SF 97 million as compared with SF 68 million at the end of 1966. It also reported a 1967 net profit of SF 1.3 million as compared with SF 1.1 million in 1966. In both 1966 and 1967, the institution paid a 15 per cent dividend to its stockholders.²³

Switch trading is cumbersome and inefficient, despite the skill of the switch traders. But for lack of a better payments system, switch trading has been increasing in recent years. It is still very small in comparison with the business financed by regular foreign exchange. Admittedly, it is a poor substitute for foreign exchange but the nations and trading firms using it believe it is better than no trade at all.

²¹*Business Week*, *op. cit.*

²²*Economist*, *op. cit.*

²³*Neue Zurcher Zeitung*, Zurich, February 18, 1968.

EXPORT DEVELOPMENT IN INDUSTRIAL ESTATES*

THE POTENTIAL contribution of small industries to India's export effort hardly needs any emphasis. It has, however, remained largely untapped—a fact which points to the need for positive measures to draw them into the fold of export effort. A programme of orienting the production of small industries to exports should necessarily start with those units which are functioning under relatively better conditions and have achieved higher production efficiency. Such units are, by and large, located in the industrial estates. Estates should, therefore, be the focal point of the programme of stimulating effort towards production for export in the small-scale sector.

Recognising the important role the industrial estates can play in developing exports from the small-scale sector, the Standing Committee on Export Promotion of Small Industries, constituted under the Chairmanship of Shri H.D. Shourie, Director General, IIFT, by the Ministry of Industrial Development and Company Affairs, set up a sub-committee to study the problems of industrial estates *vis-a-vis* production for export. The Sub-Committee comprehensively examined this question on the basis of its visits to six industrial estates and discussions with the interests concerned. It presented its Report at the second meeting of the Standing Committee. This Report highlights the important role that industrial estates can play in India's export effort. It also brings into focus the problems of production and export marketing, which hamper the fuller utilisation of the export potential of the units in the industrial estates. It presents a concrete and bold programme for greater utilisation of industrial estates for export promotion. This article sums up briefly its major findings and recommendations.

The industrial estates of Ambatur, Guindy, Kandivlee, Ludhiana, Okhla and Sanat Nagar, to which this study relates, are some of the most important and highly developed estates in India. Each of them is the biggest among the estates established in the state of its location. The 897 sheds and 662 units functioning in these

*Based on the Report of the Sub-Committee of the Standing Committee on Export Promotion of Small Scale Industries, constituted by the Small Scale Industries Board, Ministry of Industrial Development and Company Affairs, Govt. of India, and prepared by Paras Ram, Research Officer, Indian Institute of Foreign Trade, and Member-Secretary of the Sub-Committee.

estates as on September 30, 1967, form 19.2 per cent and 16.9 per cent respectively of the sheds and units functioning in all the estates in India.

Production

Production data in respect of 3,238 units in all the estates in India and 644 units in the six estates under reference are available, though 3,918 units and 662 units respectively were reported to be functioning as on September 30, 1967. The respective half-yearly production of these units has been reported to be of the value of Rs 4,626 lakhs and Rs 1,709 lakhs respectively. The total production of the 644 units functioning in the six estates under study, thus, accounts for 36.9 per cent of the total production of the units which have reported production from all the estates in India. The units in the six industrial estates account for more than one-third of the total units functioning in all the estates in India. The small enterprises in these estates have gained sufficient production efficiency.

Facilities and Incentives

Production efficiency has been attained largely because of the various facilities and incentives made available to the units by the government organisations. These facilities and incentives include, besides factory accommodation with all the modern amenities, the provision of rent subsidy for an initial period of five years, facilities of finance and credit, arrangement of machinery on hire-purchase and supply of raw materials. Common service facilities like tool rooms, forging shops, foundries, electroplating units heat treatment, mechanical, metallurgical and chemical testing and analytical laboratories have also been made available to the units in the estates. Though all these facilities, except concession in rent, are available to all small-scale units, industrial units in the estates benefit more because of the fact that governmental agencies are mostly located in or near the estates.

Allotment of Sheds in Estates

The Lokanathan Sub-Committee on Industrial Estates in 1959 had laid down criteria for allotment of sheds in the estates. According to these criteria, industries having export potential should be given preference in the allotment of sheds. The authorities in Andhra Pradesh, Delhi and Madras have broadly followed the principles of allotment laid down by the Lokanathan Sub-Committee. The sheds in four out of the six estates under study have been allotted to units which, by and large, are supposed to have been engaged in production for export.

Instrument of Export Production

The basic advantages of production and organisation available to the units in the estates can be exploited to generate considerable exports from the small-scale sector. The products manufactured in the estates are, by and large, consumer, intermediate and light engineering goods, which can have good markets abroad. The Industrial Estates Programme, which has so far been employed as a "Package" scheme for coordinated, intensified and integrated development of small industries, should henceforth be used as an effective instrument for development of exports from the small-scale sector. There are instances in other countries, where industrial estates have been utilised to great advantage for development of exports. Industrial estates attached to ports or airports in order to stimulate freight traffic or entrepot trade or export industries have been established in China (Taiwan), India (Kandla), Italy, Ireland, Jamaica, Malta, Singapore and the United States. Such estates have also been established or are proposed to be established in Korea, Pakistan and Puerto Rico.

Exports from Industrial Estates in India

A number of products are being manufactured and exported by the six industrial estates visited by the Sub-Committee. These are: machine tools like lathes, shaping machines, slotting machines, power hacksaws and tool bits; automobile accessories like radiators, filter elements, bolts and check-nuts, luggage carriers, cycle accessories and bicycle oil bath gear cases; expeller parts; electric motors, electric wires, amplifiers and sets; volume control, lightening arrestors, hardware and plasticware; cutlery; foam products; sports goods; dolls; and ready-made garments.

Nominal Exports

Notwithstanding the large number of items being exported from these estates, their total exports amount to not more than a few lakhs of rupees. Ludhiana Estate is the only one among the six estates, which exports about 4 per cent of its total production. In 1966-67, exports from this estate were of the order of Rs 23 lakhs out of its total production worth about Rs 6 crores. Exports from other estates are only nominal. Out of the 662 units working in all the six estates, hardly 50 units are engaged in export business. Of these 50 units, 34 function in the Ludhiana Estate.

Considering that industrial enterprises in the estates are adequately equipped to manufacture quality products and many of their products have export potential, their present export effort is rather disquieting. Presumably, this is the case with the other

estates as well. Their potential of production for export is also not being harnessed to the degree that it can be done, taking into account the advantages that have accrued from their planned development.

PROBLEMS OF PRODUCTION

The export effort of the small-scale units in industrial estates is hampered by the problems of production, which relate mainly to inadequate availability of raw materials, machinery and components, designs and samples, technical guidance, trained labour, cheap credit and finance, space, water, etc. These problems are not confined to the units in the industrial estates visited by the Sub-Committee; they are common to all small-scale units, as it is difficult to distinguish between the problems of the units in the estates and those located elsewhere. Nevertheless, wherever there are specific problems encountered by units in any particular estate, a reference to that has been made.

RAW MATERIALS

The foremost problems relate to the non-supply of appropriate raw materials, indigenous and imported, at comparable international prices. These problems are discussed in the Report in regard to (i) indigenous raw materials, (ii) imported raw materials licensable directly to actual users, (iii) canalised items, and (iv) banned items. Problems relating to supply of materials from the Raw Materials Depots have also been discussed.

Indigenous Raw Materials

The units engaged in export production in the estates are not getting supplies of indigenous decontrolled items like sheets of thinner gauges, tin sheets, CRCA sheets, MS strips (En 1A). Moreover, the prices charged by some of the producers of these materials are reported to be higher than even the prices of end-products manufactured by the producers of the materials themselves. The small exporters manufacturing products from the materials purchased from such indigenous producers, who are themselves manufacturer-exporters of end-products, are thus unable to compete with them in the international markets. It is, therefore, desirable that indigenous producers be required to supply a fixed percentage of raw materials at reasonable prices to the small-scale units. This has also been recommended by the Lokanathan Committee on Scarce Raw Materials. This suggestion should be implemented by invoking, if necessary, Section 18(g) of the Industries Development and Regulation Act, requiring the producers to

make compulsorily available a portion of their products at reasonable prices to small units. The indigenous raw materials earmarked for supply to small units should be allotted to State Small Industries Corporations for distribution to exporting units.

As an inducement to indigenous producers of raw materials to compulsorily earmark certain materials for small units, it is suggested that such quantum of the earmarked materials as is used in the manufacture of export products, be considered as exports of these producers. This would entitle them to the incentives and facilities available under the export promotion schemes.

Non-Ferrous Semis: Though these semis are produced mostly from metals imported at international prices, their indigenous producers are reported to be charging very high prices. In addition, charges made by these producers for conversion of virgin metals into semis are also reported to be much higher than the charges prevailing in other countries. This adversely affects the small manufacturers who are allowed to import virgin metals only, and not semis, and have consequently to pay high conversion charges. It is, therefore, suggested that the prices of semis produced indigenously and the conversion charges should be carefully examined and determined at comparable prices/charges prevailing in world markets.

The replenishment of steel at international prices used in the manufacture of export products is reported to be allowed only in cases where the manufacturer-exporters purchase steel directly from the producers. These producers, however, book orders for at least a wagon load, which the small manufacturers cannot take due to their small requirements and financial difficulties. Hence, the present scheme of replenishment is not fully advantageous to the small manufacturer-exporters. Since the steel purchased either from the producers directly or their stockists/dealers is the same, it is suggested that the small manufacturer-exporters, purchasing steel from the latter, should also be allowed replenishment of steel at international prices. The scheme of replenishment may also be made available in case of items like aluminium ingots, wire rods, GI wires and pig iron.

The State Small Industries Corporations are stated to be not allowed to lift the scarce materials from the producers' stock-yards at column I rates. This affects the cost of production of small manufacturer-exporters, who largely purchase materials from these Corporations. It is suggested that the Joint Plant Committee may permit the Corporations to lift the materials at column I rates as is allowed to them when they place indents directly with the producers.

Imported Raw Materials

With the revision of the definition of small industries, many units which were previously borne on the registers of Directorate General of Technical Development have been deregistered, and are now considered as small-scale units. However, such units have so far not been recognised as small units by the Development Commissioner, Small Scale Industries (DCSSI). Consequently, these units encounter difficulties in getting raw materials. It is recommended that such units may be recognised by the DCSSI expeditiously to enable them to procure their import licences.

Imports of raw materials like brass and copper tubes of some specific sizes are allowed only when they are not available with the State Trading Corporation/Minerals and Metals Trading Corporation (STC/MMTC), and these agencies issue non-availability certificates to that effect. These agencies are reported to be not replying expeditiously to the queries regarding the availability of raw materials. Consequently, the small units neither get supplies from these agencies nor are they allowed to import, as they do not possess non-availability certificates. It is suggested that the STC/MMTC may make announcements at specified intervals regarding the type, quality, size, price, etc., of the raw materials available with them. If no such announcement is made during the previous one month for a particular raw material, the licensing authorities should consider it as non-availability of that material and issue import licences accordingly.

Canalised Items

Imports of certain iron and steel items like galvanised plain sheets and black plain sheets (CRCA and CRDD sheets) have been canalised. This has been termed as discrimination between the large and small sector, and continues to be made despite the positive and forthright recommendations of the Lokanathan Committee on Scarce Raw Materials, urging "equality of treatment to all industrial units producing similar end-products irrespective of the sector to which they belong". This recommendation of the Lokanathan Committee should be implemented at least in the case of units engaged in export production.

It has been reported that in several cases the STC and the MMTC are not able to supply raw materials of the required quality, grade and specifications; in required quantities; and at the right time despite the release orders issued to the small units. This affects the production programme of small units and increases their cost of production, as they have to obtain the required materials from the open market at higher prices. It is suggested that the

STC/MMTC should maintain a buffer stock of the essential raw materials for the small units engaged in export production. They may also consider devising a method whereby Small Industries Corporations may directly get the delivery of consignments imported by them on c.i.f. basis to minimise double handling of imported raw materials.

The prices charged by the STC/MMTC for canalised raw materials like non-ferrous high carbon wire rods, sodium nitrate, aniline oil and coconut oil are reported to be much higher than the prices at which these can be imported directly by the actual users. It is suggested that the Government may direct these agencies to make available imported materials to small units manufacturing for export at comparable international prices, with minimum loading of overhead expenses.

Banned Items

Import of certain items like screw ring gauges, dial indicators and aluminium alloy strips of not more than 97 per cent aluminium content has been banned, though they are stated as not being produced in the country. It is suggested that indigenous production/supply position of banned items be reassessed, and import of items as are found to be not produced indigenously be allowed.

Before permitting import of banned items, the Chief Controller of Imports & Exports and Iron & Steel Controller stipulate that non-availability certificates be obtained from the indigenous producers. Since most of the small units are unable to obtain such certificates, it is suggested that the licensing authorities should themselves find out the availability or otherwise of the required materials, and then take a decision on the issue of import licences.

Raw Materials Depots

It has been complained that the Raw Materials Depots of the Small Industries Corporations charge much higher prices for the materials purchased from them than the prices at which they can be imported directly. This is stated to be for the double loading of prices, firstly, by the service charges of the STC/MMTC, which imports the materials in the first instance, and secondly, by the service charges of the Depots themselves. This double loading of prices affects the small manufacturer-exporters, who get their raw materials at higher prices than the prices at which their counterparts in the large-scale sector. It is suggested that raw materials released from the Depots, which go into the export products, should be supplied at prices at which they are imported directly by the large manufacturers. The service charges of both the STC/MMTC and

Depots be spread over the raw materials released for manufacturing the products for home consumption. While this needs to be done immediately, as a long-term measure it is suggested that the State Small Industries Corporations should identify essential raw materials of fast moving nature on the basis of the needs of the existing small-scale exporting units in their respective jurisdiction, secure the necessary import licences for items other than those canalised through the STC/MMTC, and import them for distribution. This would meet the long-felt need for a Raw Materials Bank. The DCSSI should take up the matter of issuing direct import licences to the State Small Industries Corporations with the Ministry of Commerce, Chief Controller of Imports & Exports, and Iron & Steel Controller.

The Raw Materials Depots should, besides stocking imported materials, stock the essential scarce indigenous materials for off-the-shelf supply to the exporting units. The Joint Planning Committee may consider earmarking of certain quantity of these materials at column 1 rates for the State Small Industries Corporations.

MACHINERY, COMPONENTS AND SPARES

The production programmes of some of the small units engaged in export production in the industrial estates visited by the Sub-Committee were reported to be handicapped by non-availability of certain types of machinery, components, spares and tools at competitive prices and of good quality. The difficulties mostly relate to items, which are manufactured indigenously by a few manufacturers. It was stated that these manufacturers, operating in a sheltered market, were charging exorbitant prices and supplying goods of inferior quality. Besides, they never cared to meet the requirements of units in the small-scale sector. It is suggested that strict quality control may be enforced on the manufacture of such components and their manufacturers be compulsorily required to supply them at reasonable prices to small manufacturer-exporters. To induce the indigenous component manufacturers to supply the components at reasonable prices, it would be worthwhile to consider their supplies as exports for the purpose of availing of the various incentives and facilities under the export promotion schemes. Till such time the quality and supply position of indigenous components improve, the manufacturer-exporters should be allowed to import them.

Machinery on Hire-Purchase

The National Small Industries Corporation (NSIC), besides charging 7 per cent annual interest on the value of machines supplied on hire-purchase, demands 6 per cent service charges. The

State Bank of India (SBI) advances loans under its "Instalment Credit" scheme for the purchase of machinery at 8½ per cent annual interest. Though the SBI's interest is slightly higher than that of the NSIC, the fact that the former does not demand any other charges makes its loans attractive in comparison to the hire-purchase terms of the latter. It is suggested that the NSIC may consider bringing at par its terms of hire-purchase to those of the "Instalment Credit" scheme of the SBI, at least in the case of small units, which require machinery largely for export production.

PRODUCT DESIGN

The Industrial Design Cell attached to the Small Industries Service Institute (SISI), Okhla, New Delhi, is engaged in evolving new designs exclusively for the small industries. It is, however, not able to cater to the requirements of the small units engaged in export production, as it specialises in designs for a limited number of engineering items like cutlery and domestic utensils, domestic electric appliances, and builders' hardware. Since there are many other items, which are produced in the small-scale sector for export, it is suggested that the DCSSI may consider expanding the activities of the Industrial Design Cell, New Delhi.

The DCSSI may also continuously make efforts to procure new designs from abroad, and arrange for their display in the display centres in the SISIs. To start with, it has even been suggested that samples of certain available imported goods should be collected and displayed at the display centres. Besides saving in foreign exchange, this step would help organise the design display in a short time.

Closely related to the problem of adopting new designs is the problem of cost that has to be incurred in the making of dies and moulds for their adoption. Since quite a substantial amount has to be invested in these dies and moulds in anticipation of export orders, small units hesitate to adopt new designs. It is suggested that the SISIs and the Export Aid for Small Industries (EASI) Scheme should share the initial expenditure on mould- and die-making. They may, however, stipulate that if the products developed from moulds and dies supplied by them are able to find export markets, expenditure incurred on the moulds and dies would be reimbursed by the manufacturer-exporters. The EASI Scheme of the STC is understood to have already taken a decision in this regard. Effective implementation of the scheme of supplying moulds and dies to small manufacturer-exporters would go a long way in developing exports of small industry products.

INDUSTRIAL SERVICES

The small units functioning in the six estates expressed, by and large, satisfaction with the various industrial services provided by the SISIs. In certain cases, however, these services are stated to be inadequate. It is suggested that each SISI should continuously ascertain the requirements of industrial services of the units engaged in export production in its jurisdiction and organise those services. In cases, where the SISIs are not fully equipped to provide certain services, they may try to arrange their availability for the small units from other institutions including the enterprises in the large-scale sector.

Common Facilities Centre for Sports Goods

Many of the 40 sports goods units located in the Okhla Industrial Estate are reported to be idle because of some difficulties including lack of technical guidance and testing facilities. Since Delhi is one of the three major centres of production of sports goods, accounting for about 20 to 25 per cent of their total exports from India, it would be worthwhile to consider the establishment of a Common Facilities Centre for this industry in the local SISI.

STANDARDISATION

The Indian Standards Institution is reported to have so far not formulated standards for some of the important export products. Besides, it is reported to have not been very helpful in translating foreign standard specifications obtained and sent to it by the manufacturers. The non-formulation of standards and non-provision of quick translation service affect severely the export production programme. It is recommended that the ISI may expeditiously formulate standards for all important export products and provide necessary translation service for foreign standards.

FINANCE AND CREDIT

By and large, all small units in India suffer from shortage of finance and credit. Their difficulties mainly arise because of (i) lack of access to capital market due to their being mostly organised on proprietary or partnership basis, (ii) lack of tangible fixed assets required as security by the institutional financial agencies, (iii) stipulation of as high a margin as 30 to 50 per cent by the State Finance Corporations and about 25 per cent by the SBI, while allowing credit against security offered, (iv) non-consideration of machines and tools, developed by the manufacturers themselves, as assets by the financial institutions, and (v) lack of provisions for small loans by Industrial Development Corporations.

The problem of arranging tangible security is more severe for the units in industrial estates, because (i) they are located in leased buildings, and (ii) most of their capital equipment is obtained on hire-purchase or arranged through Instalment Credit Scheme of the SBI. There are some units which, being in leased buildings, do not have installed machines of tangible value. These units produce sports goods or dolls, the manufacture of which is possible without machines of high value. The loans advanced to such units under the State Aid to Industries Act are not more than a paltry sum of Rs 2,000 and are hence of little significance. To enable the small units to solve their financial difficulties, it is suggested that the provision of credit should be need-based and development-oriented, and allowed to units not strictly on the basis of security but on the basis of (i) their technical performance, (ii) the honesty and integrity of the proprietors judged from their past dealings, and (iii) prospects of the development of concerned enterprises. Such a system of providing credit strictly not on the basis of security is stated to be operating in Japan under a scheme known as "Supervised Credit". The system should be examined in detail and adopted in selected units in the estates on an experimental basis. Since it is not difficult to assess the value of machines and tools developed by a unit itself, it would also be worthwhile to consider their values as assets for advancing loans.

SPECIAL PROBLEMS

Besides the general problems of production faced by the small units located in industrial estates and outside, there are certain special problems which are faced by units in the estates at Kandivlee, Okhla and Ludhiana. These problems relate to non-availability of basic amenities like drainage, roads and adequate water; difficulties in getting permission for expansion and diversification of the manufacturing line; inadequate space; and shortage of skilled labour.

PROBLEMS OF EXPORT MARKETING

The problems of export marketing found to be hampering the export effort of small enterprises, in the estates and elsewhere, relate to lack of export information, difficulties in getting export facilities such as import replenishment licences and cash subsidy, drawback/refund of customs/excise and octroi duties, and railway freight concessions; insufficiency of export finance; difficulties in adherence to and observance of the provisions of the pre-shipment inspection and in-process quality control measures; inadequate shipping facilities and high ocean freight rates; and lack of training in export marketing techniques.

EXPORT INFORMATION

Though there are many agencies, including the organisations particularly concerned *inter alia* with the dissemination of export information to small industries, many of them are not very helpful, because (i) the agencies which are posted with the latest information do not disseminate the same to all industries, and (ii) the agencies which cater to all industries are themselves not regularly posted with the latest information. In the first category are included the Export Promotion Councils, and in the second, the SISIs and the Directorates of Industries.

It is understood that for obtaining export information, import replenishment licences, etc., it is essential that manufacturers must first enrol themselves as members of the EPCs. The small manufacturers, however, find it difficult to become their members because of the membership fee that is beyond their means. It is suggested that the EPCs should charge a nominal fee from the small manufacturers so long as they do not effect exports. Thereafter, the fee may be related to the export turnover.

The small manufacturers, who are already members of the EPCs, have expressed dissatisfaction with the dealings of these organisations with them. In their view, the EPCs cater largely to the needs of the large manufacturers, because they are controlled by representatives of the large-scale sector. Presently, there is hardly any representative of the small-scale sector in the EPCs' Committees of Administration. It will be helpful if at least one-third members of these Committees are nominated from the small-scale sector. Besides, each panel of the EPCs should also have a member from the small-scale sector.

The SISIs and the Directorates of Industries are also not sufficiently catering to the export information requirements of the small enterprises. This is probably for two reasons: (i) no senior officer is exclusively responsible for export promotion work in these organisations, and (ii) there is no central export information service which could continuously pass on the information to these organisations for further dissemination. There is a need to establish such a service in the Central Small Industries Organisation (CSIO), and appoint senior officers for export promotion work.

IMPORT REPLENISHMENT AND CASH SUBSIDY

Import Replenishment

The problems of import replenishment, allowed to registered exporters, relate to, firstly, non-determination of the extent of

replenishment against all the export items, and different interpretations given by the licensing authorities to the rules relating to replenishment scheme. This results in frequent references by the regional licensing authorities to the headquarters for clarifications, and hence the delays. Secondly, there are difficulties in the utilisation of some of the replenishment licences due to limited transferability allowed under the scheme. This results in a severe limitation not only on the activities of the merchant-exporters but also of the manufacturer-exporters, who have to confine their activities to the products manufactured by them. Thirdly, the exporters in the rupee payment countries do not normally supply goods against small value licences. It is suggested that the extent of replenishment should be determined for all the export items to avoid varying interpretations, and where there is a dispute about the interpretation of policy, it should be settled in consultation with the EPC concerned. To sustain and expand the exports of small manufacturers, it should be considered how they can be given some additional incentives in the form of more liberal transfer of import replenishment licences. This transferability may, however, be extended in the first instance to items like cast iron products, which are mainly manufactured in the small-scale sector. To avoid small value licences, the policy of replenishment should be so rationalised that the value of licences is not allowed to fall beyond a certain specific amount.

Cash Subsidy

As in the case of import replenishment, the quantum of cash subsidy has been determined for a group of items without specifying the products that are supposed to comprise that group. This results in frequent references to the headquarters by the regional authorities and delays the grant of subsidy to exporters. The already meagre resources of the small exporters are affected further, thereby hampering their production and export programmes. It is suggested that where a reference has necessarily to be made to the headquarters, the regional authorities should grant 75 per cent of the amount claimed against a bank guarantee given by the exporters.

The manufacturer-exporters of certain items like cast iron products are not always able to properly utilise import replenishment licences, because the items allowed to be imported are not required by them for manufacturing their products, and they cannot sell or transfer them under the current policy. It is, therefore, suggested that such manufacturer-exporters be allowed the option of claiming either import replenishment or cash subsidy in lieu thereof. Such an option, besides being advantageous to the

exporters, will result in saving of foreign exchange and more revenue to the exchequer, for cash subsidy is subject to income-tax.

DRAWBACK OF CUSTOMS AND REFUND OF OCTROI DUTIES

Drawback of Customs Duties

The scheme of customs drawback is stated to be of limited advantage to the small manufacturer-exporters because of the difficulties in claiming the drawback, particularly in respect of items in Schedule II, for which its quantum has to be got determined after the shipment of goods, and for which the procedure is very cumbersome and lengthy, which the small manufacturer cannot easily comprehend nor comply with. Secondly, the benefit of drawback is not allowed in cases where the manufacturers have not directly imported the materials and paid the customs duties. Many small manufacturers, who generally purchase the materials from the open market, are not thus able to take advantage of the scheme. Since customs duties do go into the cost of production even if the raw materials are not imported directly, it is suggested that the criterion for giving drawback should be the use of imported materials irrespective of their source of purchase.

The claims for customs drawback are stated to be entertained only at the port of shipment and not at the port of origin. To settle the claims, frequent visits have to be paid to the customs offices. The expenditure on travelling, etc., sometimes exceeds even the amount of drawback. This happens particularly in the case of small exporters whose claims are of comparatively small amounts. It is suggested that the drawback claims of small exporters should be accepted at the port of origin.

Refund of Octroi Duty

The Bombay Municipal Corporation is stated to be levying octroi duty on goods brought into Bombay. However, the duty on goods, which are exported, is refunded after necessary evidence of export is produced. Since payment of duty in cash strains the financial resources of small exporters till the refund is made, it is suggested that the Bombay Corporation should accept a bond accompanied by a bank guarantee from the exporters in lieu of cash payment.

FREIGHT CONCESSIONS

Rail Freight Concession

The exporters have reported that claims for rail freight concessions are accepted only for those products which are mentioned

in the freight schedule and not for akin products with different specifications. For instance, if the schedule allows concessions for a 40-tonne power press, the claim is accepted against the presses of this capacity only, and not against presses of higher or lower capacity. It is suggested that products falling in one category, though with different specifications in terms of either capacity or size, should be considered for freight concession.

Road Freight Concession

Since transportation by rail involves many procedural formalities and takes a long time in comparison to transportation by road, small exporters prefer to transport their goods by road particularly because of their small consignments. But since no freight concession is allowed on goods despatched by road, the small exporters are in a disadvantageous position in comparison to their counterparts in the large-scale sector. It is suggested that freight concession may also be given on the transportation of goods by road, at least, in case of small consignments.

EXPORT FINANCE

Export Credit from EASI Scheme

The EASI Scheme offers financial assistance only to its Business Associates. Consequently, many small manufacturer-exporters cannot avail themselves of the credit facilities offered by it. Even if these exporters become its Associates, the relatively small ones among them are unable to secure benefit from its pre-shipment export finance scheme, because the Scheme does not envisage consideration of applications for advance of loan for less than Rs 10,000. Then the Scheme charges 9 per cent annual interest which is higher by as much as 3 per cent than the interest rate of 6 per cent charged by the State Bank of India. It will be desirable if the EASI adopts a larger number of Business Associates than hitherto. It should also entertain all applications irrespective of the amount of loan and bring its interest charges at par with the SBI. Moreover, the Scheme should consider outright purchase, at concessional prices, of samples of high value to be exhibited in its showrooms in India and abroad.

State Bank of India

It has been reported that the SBI stipulates that for getting loans under its export finance schemes, the letter of credit should either be opened on itself or be an open L/C. Since sometimes the foreign importers do not agree to either of the two conditions,

and want to deal only with the bank of their choice, the manufacturer-exporters cannot avail themselves of the SBI's export finance facilities. It is recommended that the SBI may consider extending its scheme of export finance against all types of L/Cs.

The Export Corporation and the State Small Industries Corporations engaged in export business do not, by and large, provide enough export finance. It is suggested that these Corporations should emulate the EASI Scheme in regard to export finance facilities.

QUALITY CONTROL AND PRE-SHIPMENT INSPECTION

Export Worthiness Certificate

The manufacturers of Ludhiana Industrial Estate have expressed difficulties in complying with the in-process quality control requirements insisted upon by the Export Inspection Council for export production. The small manufacturers have represented that for complying with this formality they have to follow a very complicated and rigid procedure and have also to incur heavy initial capital outlay for testing equipment. Consequently, some of them have been reported to have already gone out of export business. It has, therefore, been desired that the rules relating to the in-process quality control requirements and pre-shipment inspection should be restricted to products exported on consignment basis. The only test of export worthiness, according to the manufacturers, should be their capability of manufacturing counter samples and their approval by the foreign buyers.

SHIPPING

The problems regarding shipping of goods from India relate to limited sailings to Ceylon, Persian Gulf and Middle East; non-availability of through sailings without transshipment to destinations like Bangkok and Beirut; high ocean freight rates; and inadequate warehousing arrangements at ports. The last problem is, however, more severe in cases where the goods have been "shut out" by the ships at the last moment. In such cases, the customs authorities are stated to be not allowing the warehousing of such goods in their own warehouses, thereby causing innumerable problems for the up-country small exporters. It is suggested that the "shut out" goods be allowed to be removed to customs bonded warehouses till their shipment, so that the exporters have not to observe numerous customs formalities again.

TRADE FAIRS AND EXHIBITIONS

The small manufacturer-exporters have expressed their inability to participate in the trade fairs and exhibitions abroad due to

high participation costs. It is suggested that at least a 50 per cent concession be granted to the small manufacturers for participation in these fairs and exhibitions.

STUDY-CUM-SALES TEAMS AND DELEGATIONS

The small manufacturer-exporters including the Export Corporations, State Small Industries Corporations undertaking exports, and the EASI Scheme of the STC have expressed great dissatisfaction over the composition of study-cum-sales teams and delegations sent abroad. It is felt that they do not get due representation in these delegations. It has, therefore, been suggested that 30 per cent of the members of all such teams and delegations should be taken from these organisations. Since EASI is the primary agency engaged in promoting exports of small industries, its representative should be included in every delegation. Besides, special delegations and teams of small manufacturers and organisations engaged in production for export may also be sent.

DRY PORT AT DELHI

The small exporters in northern India, being located far away from the port towns, encounter a number of difficulties in complying with the formalities prescribed by the various agencies at ports. To find a solution to these problems, the Punj Committee's recommendation of declaring Delhi as a dry port be implemented urgently.

TRAINING IN EXPORT MARKETING

Organisations like the Indian Institute of Foreign Trade, Small Industries Service Institute, and All India Manufacturers Organisation have been organising training courses in export marketing techniques for small manufacturers. Their efforts have, however, so far not gone far enough. It is, therefore, suggested that such training programmes be organised on a regular and continuous basis in different parts of the country. The course content of these programmes should be more or less the same. The IIFT should work out a simple, precise and compact course content, and send it to SISIs, which should ultimately be responsible for organising these programmes. The participants should be charged nominal fees.

RECOGNITION OF EXPORT HOUSES

The recent revision in the criteria of recognition of exporters and export organisations as "Export Houses" for the purpose of giving certain financial and other facilities, has been received with

deep concern by the Export Corporations and the State Small Industries Corporations engaged in export business. Many of these corporations are not in a position to satisfy the new criterion of having export turnover of not less than Rs 25 lakhs of non-traditional products and, hence, are faced with de-recognition. Since de-recognition would severely hamper their efforts of promoting small industries' exports, it is suggested that the new criteria should not be applied in their case.

FUTURE PROGRAMME

The future programme for the better utilisation of export potential of small industries, including enterprises in industrial estates, should necessarily aim at making export business a profitable and easy proposition. For this, intensive and integrated assistance has to be provided for removing the hindrances hampering production and export programmes of small enterprises so that they achieve maximum production efficiency and effective sales in international markets.

ORGANISATIONAL ARRANGEMENTS

Central Small Industries Organisation (CSIO)

(a) *At headquarters level:* In the Central Small Industries Organisation concerned with the development and exports of small industries, there is no officer exclusively entrusted with the export promotion work. There is, therefore, the utmost necessity for creating an Export Promotion Directorate in the CSIO, as already recommended by the Standing Committee on Export Promotion of Small Industries. This Directorate should be the fountain-head of all developmental work relating to exports of small industries.

(b) *At SISI level:* An Export Promotion Cell, headed by a full-time Deputy Director, should be created in each SISI. The Junior Field Officers, at present in charge of export promotion work in the SISIs, should be designated as Export Promotion Officers.

State Directorates of Industries

(c) *At headquarters level:* As already recommended by the Standing Committee, referred to earlier, in each State Directorate of Industries, Export Promotion Officers of the rank of at least Deputy Director, if not Joint Director, should be appointed. These Officers should *inter alia* procure various forms of export assistance like customs drawback, refund of excise duties, import replenishment licences, cash subsidy and transport concessions for the small manufacturer-exporters. They should also ensure adherence to

delivery schedules of export orders by providing every kind of facility and assistance to the concerned units.

(b) *At industrial estate level:* The programme of orienting production of small units to exports should necessarily commence from the industrial enterprises functioning in the bigger estates like those visited by the Sub-Committee. The Directors of Industries in charge of these estates should open small export promotion cells in these estates. Administrative Officers/Estate Managers should be given necessary orientation in export techniques and then put in charge of these cells. The cells should *inter alia* remain in continuous touch with the export-oriented units for determining and procuring the assistance required for expanded effort of production for export and of export marketing and also procure the benefits available under the export incentives schemes.

Export Aid for Small Industries (EASI) Scheme

The EASI Scheme has since its inception in 1962 gained considerable experience in organising exports of small enterprises. It would, therefore, be in the larger interest of promoting exports from the small-scale sector if the Scheme is developed to act as an "apex" organisation of all the institutions concerned with export marketing of products from this sector. Besides, it should expand its trading activities so as to cover more sophisticated and technical items, and adopt as many good industrial units as possible for participation in the Scheme.

State Small Industries Corporation

Some organisations like the EASI Scheme; Export Corporations established in Gujarat, Punjab and Uttar Pradesh; Haryana State Small Industries and Export Corporation; and Small Industries Corporations in Maharashtra and Rajasthan export the products of small industries. Total exports of these organisations have, however, been small, which shows that they are not fully exploiting the export potential of small industries. It is, therefore, suggested that appropriate ways be developed for specifically exporting small industries' products. The establishment of appropriate organisations is, however, a larger issue which has to be resolved against the background of the experience of organisations already established. Meanwhile, it may be worthwhile to require the existing State Small Industries Corporations, where Export Corporations have not been established, to open export promotion wings and to start export business on the lines of the Small Industries Corporation in Maharashtra.

EXPORT MARKETING GROUPS

Small manufacturers are unable to effectively undertake the varied and complicated operations of export marketing. One way of developing their exports should, therefore, be the promotion of the concept of collective functioning among them by organising them into export marketing groups. Concrete measures for the organisation of such groups include *inter alia* provision of matching capital by the state governments and *ad hoc* grants and subsidies from the Marketing Development Fund.

PILOT EXPORT PROMOTION SCHEME

This Scheme is based on the concept of economic self-reliance whereby every industrial unit, which adopts it, earns not only its foreign exchange, required by it, but also much more over a period of time. Under the Scheme, a unit surrenders its actual user import licences and gets in return a specific amount of foreign exchange to be finally adjusted against its exports. The exchange allocation is similar to a cash credit account with a bank so that the unit can draw upon the allocation of a pre-determined amount.

The Pilot Scheme has been adopted with considerable advantage by M/s Vertex Manufacturing Co., Bombay. Since this firm adopted the Scheme in April 1964, it has earned net foreign exchange of Rs 2.43 lakhs, i.e., it exported goods of Rs 5.06 lakhs which contained imported raw materials of Rs 2.63 lakhs only. The Scheme should, therefore, be examined in detail and adopted for trial in a few selected small units.

EXPORT PROGRAMME FOR INDUSTRIAL ESTATES

The following are the outlines of a concrete programme for channelising the production of small units functioning in the industrial estates to export markets:

- (i) In bigger industrial estates like those visited by the Sub-Committee, the concerned Directors of Industries should immediately open export promotion cells. The concerned Estate Managers/Administrative Officers should, after orientation in export marketing techniques, be put in charge of these cells.
- (ii) These officers should, in collaboration with the officers in charge of export promotion work in the Directorates of Industries and the SISIs, undertake identification and selection of products which possess export potential, and the enterprises functioning in the estates which can manufacture the identified products. The Sub-

Committee attempted to identify some products which can be advantageously developed as major export items from the industrial estates under reference.

- (iii) The export promotion cells in the estates should immediately get into touch with the identified export-oriented units for determining and procuring for them all sorts of assistance for export production and marketing abroad. In this regard, all the problems of the units in respect of production and exports need to be solved on the lines suggested.
- (iv) The identified units should be supplied dies and moulds free of cost.
- (v) The benefits available under the export promotion schemes like drawback/refund of customs/excise duties, railway freight concessions, import replenishment licences and cash subsidy should be procured.
- (vi) The identified units should be linked up with the EASI Scheme. Export/Small Industries Corporations, etc.
- (vii) The identified units should be exported to adopt the Pilot Export Promotion Scheme.
- (viii) Possibilities of organising the identified units into export marketing groups should be explored. Special reference may here be made to the need for organising immediately a group of sports goods units functioning in the Okhla Industrial Estate.
- (ix) The Small Industries Corporations in Ahdhra Pradesh and Madras should orient their activities to export promotion of small units in the estates at Sanat Nagar and Ambatur and Guindy respectively. The Maharashtra Small Scale Industries Development Corporation should take more positive and direct interest in promoting exports of units in the Kandivlee Estate. Similarly, Export Corporations in Punjab and Haryana should be responsible for promoting exports from Ludhiana and Okhla Estates.
- (x) The Corporations, undertaking exports of small industry products, be considered for extension of facilities of "Export Houses" for obtaining assistance from the Government, irrespective of their export performance.
- (xi) The Director of Industries, Delhi, may give special financial assistance to the sports goods units in the Okhla Industrial Estate by relaxing, if necessary, normal rules.

- (xii) The sports goods units in the Okhla Industrial Estate, which are engaged in export business, be given a rent subsidy, for these units are reported to be paying higher rents than old units functioning in its Phase I.
- (xiii) The identified units be provided, if required by them, additional space for carrying out production programmes for export. This should be immediately done in case of selected units in the Ludhiana Estate, which have substantial export performance to their credit or possess substantial export potential.
- (xiv) Diversification in the manufacturing line of the enterprises should be permitted in case that is required for undertaking production for export.
- (xv) The export-worthiness of an enterprise should be judged on the basis of its capability to manufacture counter samples of products, which are approved by foreign buyers.
- (xvi) The identified units should not be charged any membership/registration fee by the EPCs till they effect exports. Moreover, the fee should be related to the export turnover of the small manufacturers.
- (xvii) Special study-cum-sales teams and delegations of the identified enterprises should be sent abroad.
- (xviii) To ensure implementation of the suggestions above, State Export Action Committees be appointed under the chairmanship of the respective Directors of Industries.

COORDINATED PROGRAMME

Implementation of various measures suggested above cannot be undertaken in isolation, for this involves more than one organisation and the impact of these measures would be felt not only by small industries but also by medium and large enterprises. There is, therefore, the utmost necessity of evolving a coordinated programme whereby all the concerned organisations come close to each other for quick implementation of the suggested measures.

Central Export Action Committee

The task of evolving the coordinated programme, suggested above, should be undertaken by the Development Commissioner, Small Scale Industries. It will be desirable to appoint a Central Export Action Committee representing the various organisations, concerned with production and exports, and the representatives of the associations of small industries. It should meet periodically,

discuss the problems affecting the export effort of the small units and take prompt decisions. This Committee should not be a discussion forum and recommendation-making body but a committee charged with the responsibility of quick decisions. Only officers, competent to take decisions, should be represented on this Committee and attend its meetings. The establishment of this Committee will be a unique experiment in the export promotion programmes of the country.

State Export Action Committees

On the pattern of the Central Export Action Committee, similar committees should be formed at the state level under the chairmanship of the respective Directors of Industries. These committees should meet bi-monthly or quarterly to take decisions on matters which could not be decided earlier. Only such officers should be represented on these committees and attend their meetings, who have the power to take decisions. The matters, which remain unresolved in these State Export Action Committees and warrant decisions of Central authorities, would be referred to the Central Committee.

JUTE CARPET BACKING IN AUSTRALIA*

JUTE backing in Australia is used in (i) tufted carpets, (ii) bonded or drum type carpets, and (iii) folding doors and partitions. About one-tenth of the jute backing market is for bonded carpets, but the demand for and hence production of such carpets has been falling for the past few years. For instance, in 1966-67 the production of bonded carpets and pressed felts together declined by 50 per cent compared to the preceding year and it is likely to witness further decline in the subsequent years. Folding doors and partitions account for 1-2 per cent of the overall market for jute backing in Australia and the demand for them is growing, but that does not mean much to the total demand, for it is the tufted carpets which mainly determine the size of the existing market and future prospects for jute backing. The rest of the analysis, therefore, is devoted to the use of jute backing in tufted carpets unless otherwise specified.

In tufting, the pile yarn is inserted by needle into ready-made hessian backing at a high speed. The pile is secured by latexing the back so that the tuft is held by rubber or a similar substance. The process reminds one of a sewing machine except that there are 1,112 needles in a 15-ft. machine stitching in pile at a rate of over two yards a minute. The needles are mounted on a bar, usually $5/32$ inch apart or 6.4 to the inch. The backing hessian is driven under the needles by spiked rollers and it is the speed of this that determines the closeness of pile, usually 7 or 8 tufts to the inch. The height of the pile is determined by cams, which control the length of the needle stroke through the hessian, held in place by reeds on a needle plate. As the needles move through the plate, loopers hook between the yarn and the eye on each needle and hold the yarn while the needle returns through the hessian, after which they move back to take hold of the next row.

With the installation of attachments, varicoloured carpet can be made to give colour patterns. Random designs can be tufted by the use of printed (space-dyed) and stippled yarns. But in Australia, by and large, monotone tufted carpets are being made at present, although by giving carved effects, patterns in monotone are made. Since the latest machines have not yet been installed in the carpet industry of Australia, the average Australian tufted carpet

*Prepared by Dr. P.N. Kaul, Dy. Director, All India Handicrafts Board, under the guidance and supervision of the Indian Institute of Foreign Trade, New Delhi.

is inferior in quality to its counterpart in the USA or the UK where modern machines are in use. However, Australian carpet industry has initiated action for installing modern machines, which will improve the quality of tufted carpet and also enable the industry to have larger varieties.

Although tufting process was introduced to the Australian carpet industry in mid-'fifties, its production increased to significant proportion only in early 'sixties. In the fall of 1967, there were 15 carpet mills in Australia, of which 11 were located in the state of Victoria, three in New South Wales and one in Tasmania. All of them are manufacturing tufted carpets along with other types.

The share of tufted carpets in the total market for soft floor coverings has been increasing at a fast rate over the past years. While in 1964-65, tufted carpets formed 28.4 per cent of the total soft floor coverings production, their proportion rose to about 50 per cent in 1967 (August-September).

TABLE I
PRODUCTION OF TUFTED CARPETS

('000 sq. yds.)

<i>Year</i>	<i>Tufted carpets</i>	<i>Total soft floor coverings</i>	<i>% of col. (2) to col. (3)</i>
(1)	(2)	(3)	(4)
1964-65	3,280	11,542	28.4
1965-66	3,938	11,733	33.6
1966-67	5,256	12,609	41.7
1967 (Aug.-Sept.)	1,630	3,270	49.8

SOURCE: *Production Statistics*, Commonwealth Bureau of Census and Statistics, Canberra.

The rising trend in the share of tufted carpets is likely to increase further. At the time of the Survey (December 1967), eight tufting machines in addition to the existing 30, were under installation. Orders for another 20 machines were at various stages of execution and these machines are likely to be in operation by the end of 1969. The shift from woven and drum types to tufted carpets and increase in their production have been faster in some other

countries. For example, in the USA their production had reached 315 million sq. yds. in 1967 from 176 million sq. yds. in 1963. The share of tufted carpets in the overall domestic production of soft floor coverings in the USA increased from 9.4 per cent in 1950 to 90.0 per cent in 1967.

According to some respondents, in Australia the share of tufted carpets is likely to reach 60 per cent in the next two years and 70-75 per cent in another five years. Annual production is likely to go up at least by 15-20 per cent.

MARKET SIZE AND IMPORT TRENDS

Synthetic materials are not yet used as primary or secondary backing of carpet, so the total market for carpet backing in Australia consists of jute only. Jute backing is not made in Australia nor any undue stockpiling of the product was reported during the past few years. As such, annual imports may be treated as equivalent to domestic demand for jute backing. Table II below and Table III on the next page show the trend in imports in volume and value respectively during the past five years.

TABLE II
IMPORTS (VOLUME) OF JUTE BACKING

	(Volume in sq. yds.)					
	1962-63	1963-64	1964-65	1965-66	1966-67	1967 (July-Sept.)
India	2,181,761 (72.7)	2,771,293 (80.5)	3,311,378 (78.8)	4,536,314 (98.1)	6,625,475 (91.8)	1,426,496 (84.3)
Pakistan	330,278 (11.0)	322,220 (9.4)	401,964 (9.6)	49,063 (1.1)	567,918 (7.9)	263,288 (15.6)
UK	479,379 (16.0)	326,003 (9.5)	474,353 (11.3)	16,025 (0.3)	17,296 (0.2)	3,616 (neg.)
Others	8,815 (0.3)	24,357 (0.6)	13,293 (0.3)	23,375 (0.5)	10,012 (0.1)	1,987 (0.1)
TOTAL	3,000,233 (100.0)	3,443,813 (100.0)	4,200,988 (100.0)	4,624,777 (100.0)	7,220,701 (100.0)	1,695,387 (100.0)

NOTE: (1) The figures relate to import of hessian of 12 oz. or less per sq. yd.

(2) Figures within brackets denote percentages.

SOURCE: *Import & Export Statistics*, Commonwealth Bureau of Census and Statistics, Canberra.

During this period, imports of jute backing have gone up in volume by 140.7 per cent, from 3.0 million sq. yds. in 1963-64 to

TABLE III
IMPORTS (VALUE) OF JUTE BACKING

(Value in A\$)

	1962-63	1963-64	1964-65	1965-66	1966-67	1967 (July-Sept.)
India	407,934 (70.1)	510,656 (77.1)	622,664 (75.3)	831,354 (97.4)	1,204,235 (91.3)	244,322 (83.8)
Pakistan	46,948 (8.1)	44,428 (6.7)	51,148 (6.2)	10,545 (1.2)	100,323 (7.6)	44,450 (15.2)
UK	122,036 (21.0)	94,038 (14.2)	144,532 (17.4)	5,246 (0.6)	9,685 (0.7)	1,417 (0.5)
Others	4,834 (0.8)	13,382 (2.0)	9,270 (1.1)	6,702 (0.8)	5,246 (0.4)	1,536 (0.5)
TOTAL	581,752 (100.0)	662,504 (100.0)	827,614 (100.0)	853,847 (100.0)	1,319,499 (100.0)	291,725 (100.0)

NOTE: Figures in brackets are percentages.

SOURCE: *Import & Export Statistics*, Commonwealth Bureau of Census and Statistics, Canberra.

7.22 million sq. yds. in 1966-67, valued at A\$581,752 and A\$1.32 million respectively. In terms of value, however, the percentage increase works out to 126.8, which obviously is a pointer to decline in the unit value. Thus, the offtake of jute backing stepped up at an annual average rate of 28 per cent in yardage and 25 per cent in Australian dollar value. Moreover, the trend has been continuous. With 1962-63 as the base year, the indices of volume of imports increased annually to 114.8, 140.0, 154.1 and 240.7 during the following four years respectively. A more prolific increase took place in 1966-67. Apart from taking into consideration the fluctuating factors of forward trading and building up of stocks by mills, the trend in imports seems to be in consonance with the general trend in production of tufted carpets except in 1966-67.

Indian Jute Backing in Australian Market

In mid-'fifties, when the manufacture of tufted carpets first started in Australia, jute backing was almost entirely supplied by Scottish jute mills in the UK. However, it did not take long for India to enter the Australian market in a big way and capture a substantial share. Of the total Australian imports of 3.0 million sq. yds. in 1962-63, India accounted for 2.2 million sq. yds. or 72.7 per cent. India improved its position to 98.1 per cent in 1965-66. But for a fall in its share in 1966-67 compared to the

preceding year, India has been consistently improving its position. Figures for 1967-68 having been available only for the first three months at the time of the Survey, calculations of India's share in this year could not give a complete picture. It is expected that the increasing trend will continue to be maintained in the future. The trend in regard to value of imports is more or less the same as in the case of yardage.

The indices of relative increase among main suppliers are given in Table IV. These indices show that, in 1962-63, the volume of imports from India went up at a rate higher than the overall increase in total imports. India's exports in five years, 1962-63 to 1966-67, went up by 203.6 per cent in comparison with a 140.7 per cent increase in the total imports during the same period. Obviously, during the past quinquennium India has considerably improved its position partly at the cost of other suppliers. Consequently, India's competitive ability is now much stronger than in 1962-63.

TABLE IV
INDEX OF RELATIVE SHARE OF EXPORTING COUNTRIES

(Base year: 1962-63=100)

	1962-63		1963-64		1964-65		1965-66		1966-67	
	Vol.	Val.	Vol.	Val.	Vol.	Val.	Vol.	Val.	Vol.	Val.
India	100.0	100.0	127.0	125.1	151.8	152.6	207.9	203.7	303.6	295.0
Pakistan	100.0	100.0	97.6	94.6	121.7	108.9	14.9	22.5	172.0	213.7
UK	100.0	100.0	68.0	77.1	99.0	118.4	3.3	4.3	3.6	7.9
Others	100.0	100.0	276.2	276.9	150.7	191.8	265.1	138.7	113.5	108.7
TOTAL	100.0	100.0	114.8	113.9	140.0	142.3	154.1	146.8	240.7	226.8

Apart from India, Australia imports jute backing from Pakistan, the UK, Canada, West Germany, Italy, Japan, Sweden, the USA and Belgium-Luxembourg. The shipments of none of these countries individually or collectively, excepting Pakistan and the UK, are of any significance. For most of these countries, shipments are possibly re-exports as they do not have jute backing industry of their own. The share of these countries (the UK and Pakistan apart) has never been even 1 per cent of the total market supplies. Moreover, their joint share in the total imports has shrunk from 0.3 per cent in 1962-63 to 0.1 per cent in 1966-67.

In the earlier phase of the evolution of tufted carpet industry in Australia, the UK was the main supplier of jute backing, but

with the appearance of the Indian product in large quantities, the UK's shipments came down continuously, reaching 16.0 per cent in 1962-63. The rate of decline was accelerated after 1964-65, reaching 0.2 per cent of the total imports in 1966-67. In the first quarter of 1967-68, it fell to negligible proportions. With 1962-63 as the base year, the index of the UK's exports to Australia in 1966-67 was 3.6 only.

Pakistan's position has been different. It entered the Australian market later than India. Pakistan's exports rose to 72 per cent in the quinquennium ending 1966-67, but Pakistan has not been able to improve its share of the market. It is only in July-Sept. 1967 that Pakistan increased its share to 15.6 per cent compared to 7.9 per cent in the full year of 1966-67. In spite of the improvement made by Pakistan, it is probable that India's share will be maintained more or less at the level already attained by it. This is so because the Government of India has recently reduced the export duty on jute products including jute backing. In December 1967, in the wake of devaluation of the British pound, Pakistan imposed an export duty on jute backing. It was withdrawn within three days, but quite a few forward orders were in the meanwhile cancelled by the Australian commission agents. The existence of export duty on Indian jute products, with possibilities of reduction, is having a cushioning effect in keeping the interest of Australian commission agents alive in the Indian products. They believe that whenever the market conditions demand, there are possibilities of reduction in the export duty commensurate with the needs of the situation.

Indian jute backing has been able to build up for itself a favourable image over the years. None of the mills complained of any fault in Indian jute backing except minor defects. Of course, in 1966-67, the quality of the Indian jute backing was not as good as in the preceding two years. This was attributed to drought conditions which made jute fibre harsher and harder. But all the carpet mills hastened to add that of late the product was as good as it was before 1966-67. One of the respondents pointed out that there was unevenness in the weave, but this too is not considered a serious problem, particularly because it goes all right with low and medium quality tufted carpets, although it might cause some difficulty in the case of high quality tufted carpets. This aspect should be looked into by Indian manufacturers of jute backing.

Apart from improvement in quality, the most important factor which keeps the Indian product in good stead is its price. It is the cheapest jute backing in the world. Moreover, with a narrow range of fluctuations (mainly because of forward trading)

limited more to commission agents than to carpet mills, prices have been stable during the past few years. The prices of the UK and exporting countries other than Pakistan are completely out of range with Indian prices. Being on the defensive, Pakistan is forced to reduce its price to bring it on par with Indian prices. In view of the possibility of manoeuvrability in Indian prices on account of a pliable export duty, jute interests in Australia stick to Indian supplies even when the prices of the two countries are at par.

On the basis of the figures presented in Tables II and III, given earlier on pp. 493-494, the unit values of jute backing imported into Australia have been worked out and are presented in Table V.

TABLE V
UNIT VALUE OF JUTE BACKING

<i>Year</i>	<i>India</i>	<i>Pakistan</i>	<i>UK</i>	<i>(A\$ per sq. yd.)</i>	
				<i>Other countries</i>	<i>Average</i>
1962-63	0.19	0.14	0.25	0.55	0.19
1963-64	0.18	0.14	0.29	0.55	0.19
1964-65	0.19	0.13	0.30	0.70	0.20
1965-66	0.18	0.21	0.33	0.29	0.18
1966-67	0.18	0.18	0.56	0.52	0.18
1967 (July-Sept.)	0.17	0.17	0.37	0.77	0.17

NOTE: The unit values are based on f.o.b. price of the countries of origin. Ocean freight, marine insurance and importers' mark-up are excluded. There is no import duty on jute backing in Australia.

The quality of Pakistani jute is better than that of Indian jute, but it is neither woven nor rolled properly. In order to pass smoothly through the machine, the backing roll should have straight edges. Indian jute backing has straight edges but not Pakistan's. The width of the tufting machines is generally over 140". Almost all the supplies from India are available in widths beyond 140", which ideally suit Australian carpet mills. On the other hand, from Pakistan quite a significant proportion of yardage is available in the width of less than 140". One of the respondents said, "Jute fibre of Pakistan is excellent, but the management of mills is not competent and their output is not big enough. Moreover, Pakistan is mainly interested in the US market".

Early start and well-established relations are also keeping the Australian commission agents and Indian exporters together. Over the years, business relations have been personalised. These advantages are not available to Pakistan. To give but one example, an important importer said: "With Pakistan, we do not have personal relations. Pakistanis cannot be depended upon. Their managerial personnel change quite often. The technical know-how in India is of higher standard. Research carried on in India is more broad-based. In spite of the relatively low quality of Indian jute fibre, the backing material is being improved with the help of research and technical know-how." Since research is expected to be a continuous process and is likely to gain further momentum, Indian jute backing is likely to score over Pakistan in the quality of fibre as well.

Scottish mills, using Pakistani jute fibre, produce the best jute backing. They have up-to-date machinery. Besides, jute backing is calendered, with the result that the product is flattened and gets a sheen not to be seen in Indian or Pakistani product. Since the fabric is flattened, there are less needle deflections, but because of its exorbitant price, the Scottish backing is not likely to gain favour with the Australian commission agents and carpet mills. Even after devaluation of the British pound, the UK prices are out of range compared to Indian prices.

FUTURE DEMAND

As stated earlier, the use of jute backing in bonded type of carpets and for lamination purposes is not going to influence significantly the future demand for jute backing in the Australian market. The sole demand for jute backing is, therefore, derived from domestic tufted carpet industry, the production of which is likely to touch 18 million sq. yds. in four years. The average annual rate of growth in four years ending 1967-68 works out to about 17 per cent. Towards the end of 1967, thirty tufting machines were in operation in 11 carpet mills.

Australia also imports tufted carpets. Its imports increased from 129,526 sq. yds. in 1964-65 to 1.37 million sq. yds. in 1966-67. The USA is the main supplier, followed by the UK, Japan and Canada. The enormous increase in imports is all the more significant because there is an import duty of $27\frac{1}{2}$ per cent in general and $12\frac{1}{2}$ per cent in preferential on tufted carpets. The high quality and patterned tufted carpets, which are not produced in Australia, are generally imported. During the last year or so the carpet mills have realised the change in the pattern of domestic demand. Even retailers are pressing them to improve the quality. The process is likely to gain a firm foothold with the installation of new machines,

which are expected to produce better carpets of wider varieties. In its report on textiles published in December 1967, the Tariff Board of Australia recommended the raising of duty on tufted carpets to 30 per cent in general and 15 per cent in preferential from the existing rates of $27\frac{1}{2}$ per cent and $12\frac{1}{2}$ per cent respectively. The Tariff Report says evidence suggests that tufted carpet will gain an increasing share of the Australian market. During the past four years, its share has gone up from 28.4 per cent to 49.8 per cent of the total domestic production of soft floor coverings. However, apart from granting a marginal increase in the import duty, "the Board does not consider that it would be within the functions of the tariff to provide protection at high levels to offset any difficulties that the industry or firms within it may face because of (this) excess capacity". It is a fact that besides excess capacity, production process as it is today does not warrant desirable economies in operational costs. That is perhaps the reason for rise in sale price of tufted carpets in Australia over the past few years, while during the same period prices in the USA have gone down by utilising the benefits of scale of production, modern machinery and better management.

Perhaps the nascent stage of development in the Australian tufted carpet industry is over. It is now likely to enter a new phase with emphasis on quality, variety and more efficient production. During the past one year the process has been set in motion. The recommendation of the Tariff Board and installation of new machines are likely to accelerate this process. As such, the rate of growth in imports of tufted carpets may slow down in future.

Jute backing is used for two purposes, i.e., for primary and secondary backing. Primary backing goes with the yardage of carpets produced, and secondary backing is used in some carpets over the rubber coating to impart sturdiness to the carpet. In the USA, secondary backing is very widely used in tufted carpets. In Australia, it began 2-3 years ago. About 25-30 per cent of the carpets in 1967 were given secondary backing. This proportion is likely to go up in future, particularly with accent on production of high quality carpets and increased use of nylon and acrylics as surface material, so the market for secondary backing is likely to expand in the future. On the whole, it is expected that the domestic production of tufted carpets will increase at an annual rate of 15-20 per cent during the next five years. The demand for backing is likely to increase at a higher rate as a result of increase in the consumption of secondary backing.

JUTE VS. SYNTHETIC CARPET BACKING

Synthetic carpet backing was first introduced in Australia in 1967. It mainly consists of three products, namely, (i) woven film, called

"Poly Bac", made by Patchogue Plymouth Company; (ii) non-woven, called Typar, made by Du Pont; and (iii) non-woven Alamo Locktuft made by Philips Petroleum Co. All these products are made in the USA and are of polypropylene fibre. Carpet backing made of polypropylene fibre was introduced to the US market in 1965. Polybacks are made in other countries too, notably the UK and Japan, but none of them has introduced its product to the Australian market. The American manufacturers have launched high-pressure promotional campaigns for establishing polybacks in Australia. Rolls are being sent free of cost for experimentation. An enormous volume of literature, explaining polyback's properties and relative advantages over other jute backing, is regularly received by Australian carpet mills direct from polyback-makers in the USA or through their agents in Sydney and Melbourne.

The advantages claimed for synthetic backing are fantastic. Some of these claims may be true, but quite a few are alleged to be either not true or grossly exaggerated and, therefore, need to be tested to arrive at the reality. Some of the advantages claimed for polyback are: absence of needle deflection; stains cannot set through the back, particularly in nylon carpet; stability in price ("it can go down but not go up"); consistent quality irrespective of seasonal effects; holds the tuft closer; lighter in weight; more yardage per roll compared to jute backing; involves less freight cost; unaffected by sun and water; the fibre does not break by coming into contact with moisture; does not stretch under humid conditions; does not wrinkle or buckle; moth-proof; hides the barest minimum of the tufted yarns; carpets with polyback can be thoroughly rinsed because the backing does not absorb water; price is the same for both 12' and 15' widths; replaces all grades of jute ranging from 8 oz. to 12 oz.; improves tufting efficiency by 50-85 per cent on cut pile acrylics and approximately 15-20 per cent on loop pile continuous filament constructions; offers less abrasion and strain to the yarn; reduces time for clean-up due to absence of jute fuzz, etc.; less breakage of the face yarn; and saving of 15 minutes per shift when using a 600-yard roll of polyback vs. a 300-yard roll of conventional backing. The Patchogue Plymouth Company claims that "by replacing conventional backing with 'Poly Bac' saving would be 5 cents to 10 cents per yard and after 'Poly Bac' has been run for a period of time and the mill personnel become fully familiar with it, the savings increase radically". A study of the advantages claimed by two polypropylene-makers indicated that they were not sure of some of the advantages and some others had been stretched too far. It should be possible for the Indian Jute Mills Association to get the claims verified. Having done that, it could launch a counter campaign in Australia and other countries consuming jute backing.

Although polypropylene backing has been experimentally tried by the carpet mills in Australia, none of the carpet makers has used it commercially nor is any mill reported to have programmed to use it at least in the immediate future. The US polyback-makers sent sample rolls, which were tried by a few mills. They did not face any problem in using it. They had to make only minor adjustments in the tufting machines. They felt that the product was good and involved less needle deflection and is damp-proof, but about other advantages claimed by manufacturers they were not sure.

At present, the Australian mills are not interested in the change-over because of the price difference in the natural and synthetic fabrics. In general, for primary backing the mills in Australia purchase jute backing at 19 cents to 20 cents a sq. yd. The c.i.f. price of the polyback is 22 cents to 24 cents. There is no duty on jute backing, but polyback is subject to an import duty of 45 per cent, making the synthetic product far costlier than the natural jute fabric. The real competition between the two products will start only when the present gap in prices is closed. It is reported that the polyback-makers in the USA are trying hard to reduce its cost and price.

In Australia, polypropylene is not being made at present, but one firm intends to do so in near future. It will produce woven polypropylene strips. However, it was reported that the product is expected to be far from satisfactory, at least for the next 3-4 years. Being a small unit, it may also not be able to have price advantage in spite of the high duty on the imported stuff. Besides, the manufacturer intends to make only fabrics of narrow width up to 72" or so. The Japanese, so far as the Australian market is concerned, are concentrating their efforts on synthetic wool-packs, though in that case too, it may incidentally be noted, they have not been able to cause any significant damage to Indian or Pakistani jute wool-packs.

It may be noted that even in the USA, polyback is being used only as primary backing. It is not at all suitable for secondary backing, though research in this direction is being carried on. These tall claims and intensified promotional efforts in the USA notwithstanding, polyback has not gained much of a prominent place as primary backing material though it was introduced to the market in 1965. However, to arrive at dependable conclusions in this regard, a study of the US market seems to be necessary particularly from the view-point of the likely trends in demand in future. The status that polyback attains in the USA is going to affect the overall global market for jute backing.

It was reported that the strips of polypropylene in the weave have a tendency to become loose. Thus, in spite of the better strength of the man-made fibre, it may not hold the tufted yarns close to each other. The heat at which the bonding agent is applied to polyback destroys the orientation of the poly yarn/film. It becomes floppy. This was a problem faced by a few mills in Australia when they experimented with polyback samples. In the USA, they spray polypropylene powder on polyback to bind the backing and the pile yarn. Jute and rubber get bound because jute is absorbent. The probability of separation in backing and rubber coating is greater.

It seems polyback sweats and gives out stinking smell. Being almost half the weight of jute, it does not impart the thickness and weight necessary for a carpet to lie firmly on the floor.

The increased yardage per roll, leading to cost reduction in respect of polyback, does not seem to be an advantage over jute. According to a leading jute commission agent, jute backing rolls of 250 yds. were used by only one mill in Australia. The rolls of 300 yds. and 400 yds. each were shared equally by the rest of the tufters. The fact is that the Australian mills are not in a position to handle rolls bigger than 300-400 yds. each. Jute, unlike polypropylene, has moreover the advantages of appearance, body and substance.

BOOK REVIEWS

MACRO STRUCTURE OF PUBLIC ENTERPRISE IN INDIA

BY ISHRAT H. FAROOQI

Published by Faculty of Commerce, Muslim University,
Aligarh, 1968; Pp. X+259; Rs 20.00.

While focussing attention on the structure of public enterprises, the author, Dr. Farooqi, has rightly stated that with the growth of industrialisation in India and enunciation of the objective of a socialistic pattern of society, public sector has assumed considerable importance in our country. Its success depends on the efficiency of those, entrusted with the task of policy-making, and delegation of authority to the comparatively lower levels of hierarchy. The best results can only be ensured by a rational use of "men, materials and methods". In this context, the author stresses that management should not be treated as an abstract or a philosophical phenomenon; it is measurable and objective, and results from collective behaviour guided by socio-economic motives. These motives determine the structural organisation and both macro structure and micro structure should conform to objectives set forth for the enterprise.

Dr. Farooqi's *Macro Structure of Public Enterprise in India* is a valuable contribution to the study of functional behaviour of management in a public enterprise. The book adds new dimensions to its definition so as to make it more meaningful. To give but one instance, "In the case of public enterprises, Parliament, Minister, Government and the Boards constitute the 'macro' structure while the micro structure consists of an internal organisational set-up headed by the highest echelon which should be responsible for policy-making and managing the managers". While differentiating between the nationalised undertakings and public undertakings, the author adumbrates the view that the basic ingredient of nationalisation is "taking-over" or transfer from private to public ownership and maybe with or without compensation, but a public undertaking is created by the state from the very beginning.

Analysing the present organisational set-up of public enterprises, he is of the view that it is not only the statutory provision that determines the functioning

of the Board but also the practices followed by the higher economic policy-making bodies that have a direct and indirect bearing on the functions and the powers of the Board of Directors. For an industrial enterprise, a functional Board is suitable, but for a commercial and financial enterprise a policy Board irrespective of whether the enterprise is a company or a corporation would be better. Here the composition of a Board of Directors, mode of appointment, remuneration, official and non-official membership, position of the Chairman, functions and powers of the Boards, etc., have been critically examined in the context of Indian conditions.

The book also contains lists of public sector enterprises, scientifically classified under broad categories, and the Articles of Association and Instruments of Instruction common to most of the government companies. Being a successful Ph.D. dissertation, it is exhaustive and analytical. It will be useful if it is supplemented with a micro study of public enterprises in India including also brief write-ups on organisational structure of public enterprises in developed countries and possibilities of giving an export orientation to public sector in India.

—R.P.S. Verma
&
M.S. Sachdeva

EXPORT PROSPECTS OF TOBACCO

By National Council of Applied Economic Research,
11 Indraprastha Estate, New Delhi-1;
Pp. X+203; Rs 21.00.

Among India's traditional exports, tobacco and, to a much less extent, manufactures thereof, have proved to be steady earners of foreign exchange. India's competitive position in world markets has, however, suffered gradual erosion as a result of our not having kept pace with progressive developments in other major tobacco-producing countries. The ills of the industry obtain both in production and export sectors, wherein rapid corrective measures need to be instituted to enable India to improve its exports in consonance with increase in the world demand for tobacco.

The study, *Export Prospects of Tobacco*, is an honest attempt to explore and formulate a set of corrective measures which would ensure growth of our tobacco exports. The study has come up for review rather at a late date and, as such, the data presented may have lost some of their currency. However,

the broad conclusions arrived at in most of the areas are inescapable and differences of opinion can arise only on some of the measures recommended.

The first four chapters give a comprehensive picture of the industry in India, domestic demand and supply conditions, present and probable surpluses for export, and a detailed analysis of cost structure for different varieties under cultivation. The fifth chapter is devoted to a comparative study of differences in the cost structures of India and other tobacco-supplying countries and highlights distinctly the disadvantages impeding production in India.

This is followed by two chapters, examining the scope of reduction of costs in cultivation, marketing and financing. The findings on curing practices, grading systems and storage facilities are very interesting. Of particular interest is a recommendation for introduction of auction sales system with a view to ensuring adequate returns to the cultivator in view of the declining profits.

The chapters that follow provide information on world production of and trade in tobacco and prospects of its export to a number of major markets. On the basis of this information and in conjunction with India's ability to export, the study puts forth a number of measures to promote India's tobacco exports. The principal measures outlined relate to (a) need for diversifying production and systems of processing in conformity with regional and individual market requirements; (b) creation of an export house for dealing with monopoly buying organisations in countries, which do not have centrally planned economies, and particularly for promoting export of Indian tobacco to Japan, West Germany, Italy and France; (c) establishment of a Tobacco Board; and (d) organised collection of market information through market surveys, effective sales promotion measures including publicity, and establishing overseas offices of Tobacco Export Promotion Council towards this end. The recommendation on establishment of Tobacco Board is already under the active consideration of the Union Ministry of Commerce and the Government of Andhra Pradesh and a decision on it is expected shortly. Prospects of immediate implementation of the other measures proposed by the study are none too bright, although their importance cannot be overemphasised.

Viewed broadly, the study is a good contribution to information on the weaknesses of our tobacco industry and to formulation of sound recommendations to promote its exports. It, however, has some minor drawbacks. In its concern with exports of unmanufactured tobacco, it gives little attention to exploring prospects for the export of cigars and cheroots. The analysis of the impact of Nagarjuna Sagar Dam on shifting of areas under tobacco cultivation within Andhra Pradesh, an area where quite a few developments such as increasing acreage in southern districts of Andhra Pradesh now being under this crop

are taking place, is not very deep. For stability in international prices of tobacco, the study recommends that a Commodity Agreement be seriously mooted by India. This seems patently unimplementable, as in the world political context, it will be difficult to make Rhodesia—a major producer of quality tobacco—amenable to any such restraints. Notwithstanding these drawbacks, the study deserves commendation as an original and action-oriented work.

—K.V. Mani

A CORRECTION

The title of the book, *Techniques of Export Marketing*, reviewed in *Foreign Trade Review*, Oct.-Dec. 1968, was inadvertently given as *Techniques of International Marketing*. The error is regretted.

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ARABINDA RAY Director, The Metal Box Company of India Ltd., Bombay; formerly Honorary Director, Indian Institute of Packaging, Bombay.	Package Testing for Export Markets	July-Sept. 1968
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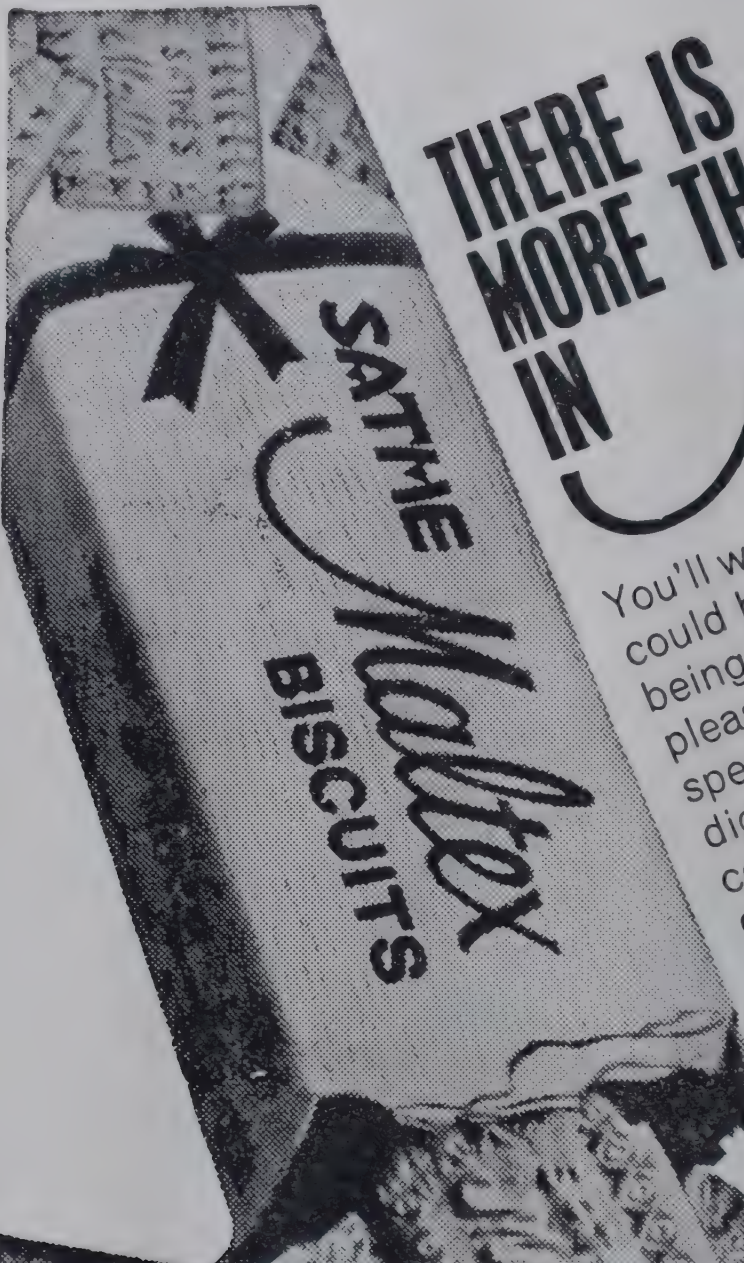
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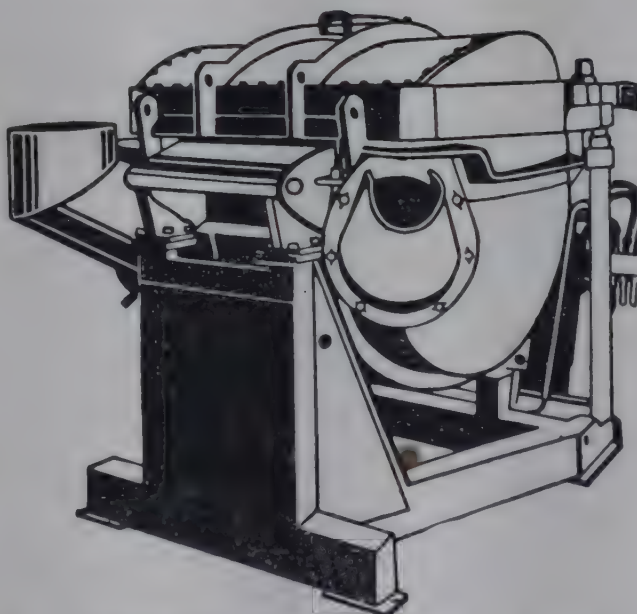
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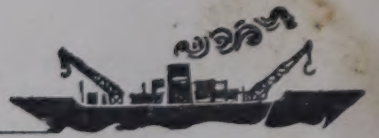
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